

An Assessment on the Development of Agricultural Initiatives for USAID/CAR

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Kazakhstan

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EXECUTIVE SUMMARY

Kazakhstan is ranked 75th out of 162 countries by the 2001 Human Development Index (HDI). The HDI measures a country's achievements in terms of life expectancy, education, and adjusted real income.

The main economic reform measures taken after independence liberalized most prices and freed up internal trade, however other reforms have moved more slowly. Land privatization has only recently begun and some economic sectors are still not entirely privatized, although the mass privatization program and the privatization of small-scale enterprises were nearly completed by 1995. The reform process in Kazakhstan has gained speed in recent years, and this has received endorsement from the international community, which is committed to support the transition process.

Kazakhstan's agricultural resources are enormous, with 20 percent of Commonwealth of Independent States' (CIS) agricultural land. However, agricultural production is low and declining. There has been a large push toward the privatization of farming and the agribusiness sector in Kazakhstan as part of its drive to secure greater self-sufficiency in food. The use of land has been transferred into private hands on more than 90 percent of state farms. The agricultural distribution system is currently undergoing significant changes, evolving from a state system to one responsive to market demand. Restructuring and raising the efficiency of production and distribution, on- and off-farm, remain elusive goals and still present an enormous challenge.

In mid-April 2002, the Ministry of Agriculture produced its most recent agricultural strategy, the State Agro-Food Program of the Republic of Kazakhstan for 2003-2005, containing an Indicative Plan for 2003-2005. This strategy has been approved by Parliament. According to this strategy, an important goal for the agricultural sector is the establishment of a land market, with the objective to establish private ownership of land.

The goals for the agricultural sector under this Agro-Food Program are essentially: 1) to ensure food security of the country by a strategy of import substitution, whereby increased domestic supply of higher quality food products will satisfy domestic demand; and 2) to ensure that this improvement in both quantity and quality (the latter to international standards) of food products leads to competitiveness in external markets.

Proposed land reform measures. Legislating private property on agricultural land; institutionalizing responsibility for inefficient use of land; encouraging preservation and increasing fertility of agricultural land; review of compliance of land distribution with the existing legislation; improving land evaluation methodology: four-stage land quotation in all regions; differentiation of capitalization ratio for all soil types and subtypes under the existing status of the country's economy; improving financial and credit relations in the agricultural sector involving land and land tenure secured mortgage through credit mechanisms.

Some 35 million hectares of Kazakhstan land are under arable crops, with grain crops occupying 23 million hectares. Per capita, there are around 12 hectares of agricultural land and more than 2 hectares of arable land. The dominant crops are wheat, oats, barley, and industrial crops (flax and

sunflower), as well as cotton, rice, sugar beets, and tobacco in the south of the country. There are also considerable numbers of orchards and vineyards, as well as vegetables, melons, and gourds.

Livestock production is a traditional and dominant agricultural subsector. No less than three quarters of all agricultural land is used for grazing. Sheep breeding is predominant, but cattle, pigs, horses, and camels are also produced.

The existing level of technical equipment is the major constraint for the efficient development of agricultural production, causing simplification of agricultural cropping, pest prevalence, and, ultimately, a reduction in product quality. The average age of the existing tractor and harvester fleet is 13-14 years with a design service life of 7-10 years.

Financing the Kazakh agricultural sector during the past decade has been very difficult due to the transition and transformation of the sector to a market economy. The transition has been slow with the most important capital resource — land — still not privatized in a manner that facilitates optimal commercial use. Product and commodity markets have been both volatile and trending lower, causing producers to rethink production decisions and land use.

Financial institutions have a very difficult time financing a sector that has volatile and uncertain production and revenue yields, does not have the long-term capital or management base for overcoming these business issues, and does not have very much collateral to enable a bank to recover loan principal and interest in the event of default. Commercial banks everywhere have competing business opportunities to finance and generate interest and fee income.

Today, the Kazakh financial sector has substantial liquidity to finance economic growth from any sector. All of these financial institutions must find income-generating loans and other investments for their funds. As creditworthy profitable opportunities in other sectors become more difficult to find, commercial banks will turn to the agricultural sector. Commercial banks are providing loans to food industry and agricultural producers; actual loan volumes are not known, as banks do not give detailed information on their portfolios. Agricultural loans to producers appear to be focused more on large- and medium-sized producers that have demonstrated a strong business and revenue history as well as sufficient collateral to support a commercial bank loan.

General integrated agriculture and water resource development model

The consultants recommend that USAID consider designing an integrated agriculture and water resource development activity adapted to local conditions within Kazakhstan. We use the term integrated from two perspectives: 1) the integration of value-chain participants (production, processing, marketing, allied industries, and market intermediaries) into a systems approach; and 2) the integration of mutually beneficial donor-funded activities into a targeted geographic area to capture potential synergies among existing donor projects.

Within a geographic area, the integrated approach would focus existing resources in pilot hydrographic units based on proximity to existing donor resources. This activity would also focus on agro-industries in the water unit, such as a fruit and vegetable or cotton industry.

The rationale for an integrated approach is based on the need to: 1) facilitate transition from Soviet planned agriculture to a market-oriented system; 2) focus on land issues because many agricultural development issues revolve around land rights, ownership, and use, including the ability to buy, sell and mortgage land; 3) mediate, if not resolve, land tenure and water management issues; 4) recognize sustainable agricultural development, including production, processing, finance, and marketing activities; and 5) create synergies among donor projects by focusing diversified resources on common problems.

The primary goal of this approach is to show the Government of Kazakhstan (GOK) how to achieve sustainable growth through increased efficiency in agricultural production, processing, and marketing enterprises and the networks in which they operate. Secondary to this goal, the approach will help: 1) reduce poverty; 2) manage natural resources; 3) contribute to national food security objectives; 4) ensure increased revenues for agricultural producers and rural citizens; and 5) build private/public partnerships, sustainable enterprise, and linkages among participating beneficiaries. These goals are consistent with government strategies, thus its willingness to support targeted pilot programs.

Critical issues

The primary criteria for the selection of a targeted geographic area (hydrographic unit) is the presence of significant donor activity. Implement where resources are available, and strive to create synergies among existing projects.

Caution. The consultants are not suggesting that USAID and other donor projects integrate their entire work plans to focus on this single geographic or hydrographic unit. We recognize that would be impractical, if not impossible to do. What we are suggesting, however, is that the individual projects dedicate a small portion of their expertise and resources to collaborate in the development of the integrated approach in the target area. For example, in the case of Kyrgyzstan, the LARC project has 18 offices throughout Kyrgyzstan, so let us suggest that they locate one office in the target area. Likewise, GTZ conducts agronomic training for farmers throughout Osh and other regions. They will be requested to implement a number of their well-developed training modules in the target area. Also, IFDC can implement one demonstration field, MASHAV can implement one drip irrigation activity and so on. The consultants believe that limited, agreed upon, and targeted collaboration is possible within a defined geographic area and will produce the synergies expected to the mutual benefit of all participants.

Coordination and management. To be effective, USAID should designate a senior coordinator — a "czar"—to manage the recommended integrated activity. The "czar" should: 1) have extensive business development experience; 2) be able to work independently from any one project; 3) be mandated to liaise with projects, donors, and officials; 4) be responsible for developing a donor project "integration strategy;" 5) have the authority to negotiate individual MOUs with all pertinent projects; 6) be responsible for monitoring and evaluating impact; 7) facilitate inter-country linkages, 8) be tasked with the collection donor project data on needed introduce policy reform that can be used to foster agro-industrial growth; and 9) be responsible for the dissemination of policy reform data and memoranda to interested trade associations and business groups that advocate for policy reform.

Approach

The Integrated Agriculture and Water Resource Development Activity could be organized into the following four components that correspond with the components of existing donor projects, such as the EDP project:

- A: Agro-industry Strategy Development and Policy Reform
- B: Association and/or member organization development
- C: Business Advisory Services
- D: Business and Market Linkages

Component A: Agro-industry Strategy Development and Policy Reform

This component would respond to two important needs: 1) agro-industries lack comprehensive strategies for their own development; and 2) agro-industry entrepreneurs can and should lead policy reform efforts.

- Agro-industry strategy development: The objective of an agro-industry strategy
 development is to bring entrepreneurs together to develop agro-industry strategies,
 where strategies define objectives, constraints, and resource requirements and inform
 specific action plans. These strategies would be used to orient TA to focus on
 opportunities and constraint mitigation.
- Policy reform: The objective of the policy reform activity is to condition the enabling
 environment in which these enterprises operate. This would be accomplished by:
 identifying and prioritizing policy constraints throughout the value chain (coordinate
 information sharing); utilizing the agro-industry council's local knowledge and
 influence to promote policy reform; and collaborating with associations and NGO's
 to advocate for reform.

Component B: Association and/or Member Organization Development

The objective of an association development component would be to encourage entrepreneurs to form effective member organizations to collaborate on: 1) joint procurement and marketing mechanisms; 2) organized information diffusion; 3) recurrent training and capacity building; and 4) the market orientation of members and democratic processes.

There are different legal forms of member organizations, and consideration should be given to each, depending on resources available in the targeted area. The fundamental question is to focus on a traditional association model or a corporate structure such as the IFC model.

Component C: Business Advisory Services

The objective of the business advisory services is to increase business capabilities of producers, processors, and market intermediaries. The following needs have been identified for each of these three groups:

- Producers (land users) have limited or no agronomic or animal husbandry education, resource management training, market knowledge, or business skills.
- Processors are reliant on old technologies and methods, are not market-oriented, are unable to access credit, and often collude with government.
- Market intermediaries provide limited services.

Component D: Business and Market Linkages

The objective of this component is to facilitate linkages among participants in the agroindustry value chain, such as producer-processor, finance, market, and public-private linkages.

For example, the objective of the finance linkages task would be to facilitate relationships between borrowers and creditors because there is a need to provide a menu of financial options depending on the country's formal financial climate.

Recommendations for Kazakhstan

Recommendation 1. Kazakhstan - Integrated agriculture and water resource development activity

Design and implement an integrated agriculture and water resource activity in a target hydrographic unit, such as in the area of Taraz, near a water training institute and on the border with Kyrgyzstan. Selection of the hydrographic unit should be based on existing donor presence, scope of the donor's work activity, and commitment to coordination efforts.

There are a number of interrelated critical issues that need to be considered if USAID undertakes project design work for Kazakhstan that center around the ability of producer–processor–market intermediaries to develop mutually beneficial business relationships. Producers have limited access to seasonal working capital, constraining their production capacity and efficiency. Processors are constrained by a shortage of working capital, which further limits their ability to offer producers/suppliers reliable production contracts. These constraints are further compounded by late payment schemes offered by purchasers of finished products. Markets are underdeveloped, and the skills required to develop existing markets are not present to any degree.

Recommendation 2. Provide training/skill development in agricultural finance

Proposed Assistance: Develop program for training commercial bank officers in such technical issues as:

Agricultural production credit and agroindustrial and food processing cash flow and credit analysis training for commercial bank officers interested in learning how to finance the sector or improving their performance

- ➤ Working with bankers and processors to develop a working capital financing formula that gives processors needed financing and bankers secure comfort of repayment or collection upon default
- ➤ Working with bankers to develop appropriate loan pricing programs that meet their profit and revenue targets; have comfortable gross and net interest rate margins; and reflect the reasonable cash flows that agricultural sector borrowers can generate
- Availability of bank officer agricultural bank training to all commercial banks and non-banks, such as CCK, financing agriculture
- > Developing borrower training to improve the quality of their business presentations to bankers and their understanding of what banks will and will not do in financing a borrower's operations
- ➤ Borrower training of promising agroindustrial businesses (food processors, wholesalers, and processing and marketing associations of producers)
- ➤ Technical assistance in seeking non-bank credit for agricultural production supplier credit, processor credit, and trade credit
- ➤ Promotion of quality agroindustrial, food processor, and agricultural association borrowers to banks for seeking financing
- Meeting with banks to learn of their interest in financing the sector
- ➤ Learning of banks' capabilities, rates and fee structures, business plan and information requirements
- Assisting borrowers in preparing business plan financial projections, including loan servicing costs in accordance with average bank rates and fees
- > Strong government, donor, and business official comments on the limited knowledge of bank management and loan officers on the underlying economics of agroindustrial, food processing, and agricultural production

Because the agricultural sector is a high-volume, low-margin business with substantial internal and external risks, lending to the agricultural sector requires substantial understanding of the business, the people involved, the product cycles of different commodities, and historical markets and market trends.

A high element of the creditworthiness of any agricultural sector buyer is character — is he or she capable and going to do what is proposed? In addition to having adequate capital and assets, experience in the business, good credit history, and favorable economic conditions to generate

proposed revenues from market sales, the bank and borrower need to get to know one another because both face substantial risk if either does not do what is promised.

- ➤ Banker: If the borrower does not grow or process the purported crop or product, the banker has little to liquidate other than land and machinery at a fire-sale price. Rarely do agricultural lenders come out whole in the case of a loan default in high-risk markets.
- Farmer or processor: If a banker does not provide the promised funds during the narrow time window in which they are needed, the entire crop will not be grown or processed as the case may be. Timing is critical.

An agricultural bank training program for loan officers and borrowers can present many opportunities for lenders and borrowers to learn about eachh other and develop the type of long-term bank/borrower relationship critical to quality commercial agricultural production and processing.

Recommendation 3. Long-term government corporate agricultural finance strategy

Provide the Kazakh government with technical assistance to develop a comprehensive, long-term strategy for transferring the government-sponsored agricultural credit companies (CCK and AFK) and services to the private sector with the objective of obtaining a greater and continuous amount of adequate financing for optimal agricultural production and agriculturally related businesses.

The Kazakhstan government has embarked upon a government-sponsored agricultural financial system to provide short- and long-term commercial credit services to agricultural producers, primarily because the developed and competitive Kazakh banking industry has largely declined to finance agricultural producers. Although the production credit structure is government sponsored, funded and partially capitalized, it has a private sector component at the retail level providing the retail credit service and assuming the credit risk of its loan portfolio. The government does not want to become the permanent lender to the agricultural sector and has set an outside goal of six years for transferring the government-sponsored financial institutions to the private sector. Nevertheless, the government wants to develop a fully operational and sustainable agricultural financial system, providing a continual source of adequate and reliable financing to creditworthy borrowers of the agricultural sector.

A fully competitive financial market will finance the level of agricultural production that the market demands, taking into consideration other competing goods and services. Governments often, particularly those of more developed countries such as the United States, the European Union, and Japan, subsidize or sponsor agricultural production or credit to produce a higher level of agricultural production for food security and to provide its citizens with an adequate supply of affordable food. Agricultural interests in those countries were generally able to generate political support for subsidies and favorable access to financing during difficult economic times when major structural adjustments were taking place in their economies that drew available financial resources away, thus financing the high-volume, low-margin agricultural sector. Subsidies and preferential access to agricultural credit both stimulate more production than the market would

normally demand as well as put agricultural production resources in the hands of the less efficient producers. Preferential access to agricultural credit or subsidized interest rates clearly reduces the total amount of debt capital that the financial community is willing to risk in the agricultural sector.

Kazakhstan is at the precipice of embarking on a potentially long-term program of agricultural subsidies and sponsorship of agricultural credit programs and facilities. The government appears genuinely interested in developing a strong agricultural production base and making sure that producers have adequate access to financing for that production. Measures undertaken to date suggest that the government wants to facilitate development of a private agricultural sector and not depend upon ever-increasing government subsidies. At this juncture, the Kazakh government would greatly benefit from a comprehensive review of the Kazakh agricultural sector, of the policy issues related to subsidizing and financing agricultural production, and of the long-term policy implications and considerations for spawning a fully developed and competitive private agricultural sector.

Proposed Assistance:

- ➤ Provide the GOK with a comprehensive budgetary and financial review in Kazakhstan with the Ministry of Agriculture and Ministry of Finance giving the government a realistic picture of the funding resources needed to achieve government policy goals.
- ➤ Develop scenarios of different types of agricultural production systems, and determine the short- and long-term financial needs of each scenario.
- ➤ Work with the government to develop alternative methods for financing a fully competitive agriculture through the private sector.
- ➤ Present different financing approaches in different markets for agriculture including government agency securities and government-sponsored private financing initiatives with a long-term goal of private financing of the agricultural sector.
- ➤ Make recommendations on the agricultural reforms remaining that would improve private financing of the agricultural sector.
- Assist the government in developing alternative financing approaches, gradually phasing out government involvement in financing the sector.
- Make recommendations on the development of sustainable government-financing corporations that includes privatization of such entities in phases, with strategic investors committed to financing the agricultural sector..
- > Develop a long-term government plan to achieve the buildup and privatize the activities.
- ➤ Develop a timetable for sunsetting of government subsidies so that the market will adjust accordingly.

- Provide technical assistance on the financial and operational mechanics of a government-sponsored liquidity fund for guaranteeing official warehouse receipts issued by bonded warehouses.
- ➤ Provide the government with other alternatives for improving the availability of financing for appropriate agricultural inputs, the marketing and processing of agricultural commodities and livestock, and the free flow of funding to the agricultural sector.
- ➤ Provide the Kazakh Agriculture Finance Corporation and the Agro Finance Corporation with technical advice on long capitalization and funding strategies based on current market and loan or leasing growth strategies

Recommendation 4: Assistance for improved water resource management

The Ministry of Agriculture sees the maintenance of irrigation and drainage systems, which have become the inter-farm systems, as a great problem, because there is no effective caretaker. The problems of deferred maintenance, increased salinity of lands, and dramatic decrease of land productivity have prompted some irrigators to create an Irrigators Alliance. The Alliance is trying to raise awareness among farmers, but it has very limited resources.

The water resources officials feel that if assistance can be provided to increase the knowledge and skills of water system operators, to equip the WUAs with modern technical equipment for on-farm water-measuring, and to financially support the nascent WUAs, it would result in more effective use of water resources. Intensified training for awareness and understanding of the WUAs' concept and principles of their work countrywide, as well as application of simple water-saving technologies and organizational/management measures, can be seen as priorities for making visible improvements in irrigation management.

In Kazakhstan as in other countries of central Asia, there is not enough water-resource management expertise at the policy level, middle-management level, or the local water users' level. This implies that a narrow focus on water users' associations alone, as expected by some local professionals, would not be fruitful. A focus on WUAs needs to be accompanied by corresponding changes in policy, law, procedures, incentives, and organizations, and by interfacing with state authorities and support systems. Institutional changes in particular, even the least controversial procedural changes, cannot be achieved without a clear understanding of what is needed

The Government of Kazakhstan would like to see the water users' associations/RCCWUs cover at least 1 million ha in the future, which is less than 50 percent of irrigated land in the country. However, there is a perceived problem with the further establishment of these associations. Farmers are basically afraid to trust the new structures and become members because they do not see much difference from the former *kolkhoz*. Therefore, farmers prefer to farm by themselves. Because of this, the Kazakh Ministry of Agriculture/Department for Foreign Investment and Relations is convinced that more technical assistance in the form of awareness and training for

<u>farmers</u> is needed, which would provide them with practical assistance. Similar TA is needed for the local government to bring more understanding of the new on-farm water management issues.

Elements of this recommendation should include:

- Training for leaders and specialists of farms and local governments, as well as for trainers for market development of irrigated agriculture
- Organization of study tours for representatives of water user association leaders and local government officials
- Development and dissemination of suitable brochures and publications on water rights and management techniques
- Preparation of additional regulations for improvement of functioning of RCCWUs
- Preparation of educational audiovisual materials and broadcasting

Regional issues

Regional agricultural land and water management training

Provide funding support for Central Asian regional agricultural land and water management training activities. Such activities would focus on land and water user rights, provision of land and water mediation services, on-farm land and water management best practices, and curriculum development. The idea is to support activities that develop viable solutions to land and water problems, create discussion/actions on land and water policy issues, and facilitate the regional dissemination of information on land and water issues.

For a number of reasons, locating training and education activities in Taraz, Kazakhstan would appear to be an optimal choice. Even though the consultants did not visit the Kazakh Research Institute of Water Management, we believe there is logic to supporting the proposed regional training and education activities in collaboration with this institute. Taraz has a long historical tradition as a city of academic research and learning (Taraz State University, twinned with Indiana University). It is equidistant between Shymkent and Almaty, covering most of the Kazakh area of agricultural production that primarily relies upon irrigation. Taraz is close to Kyrgyzstan and reasonably close to Uzbekistan, particularly the Fergana Valley, which relies heavily upon irrigated agriculture and thereby would encourage use by academics and agribusiness people and water authorities of both.

For example, support for the Institute of Water Management could include the establishment of a training program for providing land and water mediation services. This activity could also train mediators and the trainers of mediators to develop a cadre of professionals to serve rural mediation needs. A USDA-type program for mediating complex water management issues could be used as a model for this activity.

TERMINOLOGY AND ACRONYMS

TERMINOLOGY

Hakim Local district administrator

Kolkhoz Cooperative farm created during Soviet times

Tenge Currency of Kazakhstan

Hukumat Raion governmental administration unit

Oblast Regional administrative unit
Oliv Maglis Parliament of Kazakhstan

Raion Sub-oblast (district) governmental unit Sovkholz State farm created in Soviet times

ACRONYMS

ABA American Bar Association ADB Asian Development Bank

AFK Agro Finance Corporation of Kazakhstan

BAS Business Advisory Services

BVU Basin organizations

CAIP Community Assistance Investment Program

CAR Central Asian Republic
CBK Central Bank of Kazakhstan
CCK Credit Corporation of Kazakhstan

CEELI Central and Eastern European Law Institute
CIDA Canadian International Development Association

CIS Commonwealth of Independent States

CPC Crop Protection Chemicals
CWR Committee on Water Resources

DFID Department of Foreign International Development EBRD European Bank for Reconstruction and Development

EDP Enterprise Development Project

EF Enterprise and Finance

EPA Environmental Protection Agency

EW Energy and Water EU European Union

FSI Financial Sector Initiative

FTF Farmer to Farmer

FY Fiscal Year

GOK Government of Kazakhstan GDP Gross Domestic Product HDI Human Development Index

IBRD International Bank for Reconstruction and Development

IDA International Development Association IFC International Finance Corporation

IMF International Monetary Fund

KSBP Kazakhstan Small Business Program LIBOR London Inter Bank Offered Rate

MOA Ministry of Agriculture

MOU Memorandum of Understanding

MT Metric Tons

MFI Microfinance Institution

NGO Nongovernmental organization
NBK National Bank of Kazakhstan
PCA Policy Coordinating Agreement
PCI Peaceful Community Initiative
PIU Project Implementation Unit
PRC People's Republic of China
RCC Rural Consumer Cooperative

RCCWU Rural Consumer Cooperative of Water Users

RES Rural Enterprise Support
RGP Republican Enterprise Entity
SEAF Small Enterprise Assistance Fund
SDC Swiss Development Corporation
SME Small and Medium scale Enterprises

SOE State owned enterprise TA Technical Assistance

TACIS Technical Assistance Commonwealth of Independent States

UNDP United Nations Development Program

USAID United States Agency for International Development

USDA United States Department of Agriculture

USV Raion Water Management Unit VET Vocational Education Training

VAT Value Added Tax WB World Bank

WTO World Trade Organization
WUA Water Users Association

Overview

USAID/CAR provides assistance to the agricultural sector in the Central Asian Republics, primarily in the areas of water management and agribusiness development. Management of this assistance is the responsibility of the office of Energy and Water (EW) for water and the office of Enterprise and Finance (EF) for agribusiness. USAID/CAR commissioned this assessment of agricultural activities, including water resources, to expand and strengthen the Mission's assistance to the sector.

A1. Task Order Objectives

The overall objective of this task order is to help the Mission determine the nature and scope of any additional agricultural sector activities that are needed. The consultants were asked to look at many aspects of the sector, including production, policies, institutions, and agribusiness development and to identify salient trends that will affect future developments.

The goal of the activity is to determine the critical issues for an effective agricultural assistance program that builds on the strengths of existing programs and falls within the Mission's strategic plan.

The specific tasks of the scope of work include:

- An overall assessment of the agricultural sector in four CAR countries
- An examination of the programs of: (a) other donors, (b) USAID-related activities, and (c) International Finance Institutions (IFIs)
- Recommendations for new assistance activities that address critical issues to better enable the offices of EW and EF to reach their strategic objectives.

Added to the scope of work during the mission were the following:

- The assessment team should provide, in as much detail as possible, recommendations
 that the team believes necessary to advance agricultural development relative to, but
 not necessarily limited to, agricultural policy reform, land reform, agricultural market
 reform, agricultural credit, agricultural inputs, local organizational development and
 autonomy within the agricultural sector, water user associations, and farm-level water
 management.
- The detailed recommendations do not necessarily have to be within the context of the current USAID program; rather, they should reflect what the assessment team believes necessary to promote a more efficient and effective agricultural development program.

A2. Perspectives and Methodology

The consultants' approach to assessing agriculture and water has been driven by the need to focus on development of the private sector and management of water resources. The nature of private sector development is a strong indicator of the trends in agriculture and water and the constraints limiting growth in agriculture and responsible water resource management. We have made no assessment of the country's macroeconomic conditions, inflation or currency stability; we only report on others' assessments to provide context.

This assessment is not meant to be comprehensive. Some agriculture and water sub-sectors are not mentioned, as they may not have a major impact on current growth trends. Our focus and perspective draws heavily on past experiences in transitional economies in recognition of the stages or phases that transitional economies normally experience.

The consultants spent very little time in each country for this assessment. Obtaining concrete, factual information and data when the economy or government is in flux is difficult. Accordingly, the nature of the assignment and the time permitted required the consultants to develop a composite assessment based on documents, interviews, and professional judgments made in synthesizing complex and sometimes conflicting information and data. This report reflects the consultants' best collective professional judgment in providing USAID as clear and current a picture as possible on agriculture and water in Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan.

A2a. Documents used in this report include:

- 1. Government of Kazakhstan, 2002, The State Agricultural and Food Program of the Republic of Kazakhstan for 2003-2005.
- 2. World Bank, 2003, Kazakhstan Country Report.
- 3. World Bank, 2002, Kazakhstan Dry-lands Management Project.
- 4. World Bank, 2003, Agriculture Post-privatization Assistance Project Completion report.
- 5. Asian Development Bank, 2002, Agriculture Sector Review.
- 6. EU/TACIS, 2000, Action Program for Kazakhstan.
- 7. Institute of Agricultural Development in Central and Eastern Europe, 2000, Risk in Agriculture as Impediments to Rural Lending Kazakhstan case study.
- 8. EBRD, 2002, Strategy for Kazakhstan.
- 9. UNDP, 2000, Towards the Millennium Global Forum.

SECTION B

Task Order Components

Kazakhstan is ranked 75th out of 162 countries by the 2001 Human Development Index (HDI). The HDI measures a country's achievements in terms of life expectancy, education, and adjusted real income.

The main economic reform measures taken after independence liberalized most prices and freed up internal trade, however, other reforms have moved more slowly. Land privatization has only recently begun and some economic sectors have still not been entirely privatized, although the mass privatization program and the privatization of small-scale enterprises were nearly completed by 1995. The reform process in Kazakhstan seems to be gaining speed in recent years, and this has received endorsement from the international community, which is committed to support the transition process.

Successive governments have emphasized the need to create a viable, non-oil sector based on private enterprise, although little progress has been made, and have also emphasized the need for privatization. Nevertheless, the state still has important interests in the oil, gas and transportation sectors, as well as large equity holdings in metallurgical companies managed by foreign investors. No government has taken the initiative to close bankrupt companies, fearing widespread job losses. The result has been a massive build-up of inter-enterprise debt that has slowed economic growth.

Kazakhstan is in the advanced stages of negotiations for WTO membership. In October 2000, the European Union extended the special "market economy" regime to Kazakhstan, which implies anti-dumping control measures that will be more favorable. It is also a symbolic achievement to which Kazakhstan can refer during WTO negotiations. However, it is not clear that the government has a genuine commitment to an early accession to WTO and it may not be convinced that accession would be advantageous.¹

Fiscal policy has also been complicated by the government's reluctance to allow foreign investors into strategic sectors. Privatization sales have been characterized by disputes with potential investors, poor accounting practices and corruption. The majority of the banking sector's assets are now privately owned. Twenty banks with foreign ownership comprise about 22 percent of the banking sector's capital and demonstrate broad-based connections to the international financial community. The abolition of all restrictions on the share of foreign capital in the banking sector increased foreign participation even further.

To improve the business climate the government has taken measures aimed at helping enterprises modernize and improve competitiveness. These have included changes in taxation legislation that reduced VAT from the previous 20 percent rate to 16 percent, and the social tax from 26 to 21 percent. On the other hand, the government's stance towards foreign business seems

¹ Anecdotally, a couple of MoA officials indicated that Kazakhstan expected to complete the process for WTO Accession in 2006, indicating a continued cautionary approach to the WTO, perhaps until other CIS countries are ready for membership.

increasingly intransigent with a series of new laws, under discussion or already passed, that are strongly criticized by the foreign business community.

The level of income significantly differs by population groups and regions of the country. In 2001, 28.4 percent of the country's population lived below the subsistence minimum income—20.4 percent of the urban population and 38.0 percent of rural. On average, 11.3 percent earn less than the cost of the food basket, including 7.15 percent of the urban and 16.3 percent of the rural population. Unemployment is widespread with per capita income declining in 1995 to 63.4 percent of their 1990 level and making a slight recovery by 2000 (to 75.8 percent of the level 10 years before). The population of Kazakhstan has been falling over the past five years, from 15,188,200 to 14,841,900, though the rural share has remained constant at 44 percent. In 2000, women comprised 52 percent of the population as a whole.

While nominal GDP has more than doubled over the past 5 years, real GDP growth has increased from 9.6 percent in 2000 to nearly 10 percent in 2001. At the end of 2001, inflation had declined to 6.4 percent (year-on-year) from over twice that figure only two years before. Investment in agriculture was only 1.4 percent in 2000; expressed as a percentage of GDP it was a mere 0.8 percent. Yet this is a positive sign, as the previous five-year period was one of negative investment or decapitalization of agriculture.

Kazakhstan's agricultural resources are enormous, with 20 percent of CIS agricultural land. However, agricultural production is low and declining. There has been a large push towards the privatization of farming and the agribusiness sector in Kazakhstan as part of its drive to secure greater self-sufficiency in food. The *use of land* has been transferred into private hands on over 90 percent of state farms. The agricultural distribution system is currently undergoing significant changes, evolving from a state system to one responsive to market demand. Restructuring and raising the efficiency of production and distribution, on- and off-farm, remain elusive goals and still present an enormous challenge.

B1. Examination of the Agricultural Sector in Kazakhstan

In the early 1990s, agriculture was the second largest sector of the economy, contributing about 36 percent of GDP and employing about 18 percent of the workforce in 1993. The climate and soil of most of Kazakhstan are best suited to the light grazing by which the nomadic Kazakhs had traditionally supported themselves, following herds of sheep, cattle, camels, and horses around the open steppe. Until the early 1990s, western Kazakhstan was an important fishing area, but increased salinity has made the ever-shrinking Aral Sea nonproductive, which decreased fishing output.

The first signs of growth in agricultural production since independence were seen in 1999. According to data for 1999, gross agricultural production was 28.9 percent higher than in 1998. This increase was achieved mainly due to the growth in grain and other agricultural crops production. There were some changes observed in the structure of agricultural production: the share of grain output increased from 43 percent to 54 percent, while that of livestock production fell from 57 percent to 46 percent.

B1a. Agricultural sector overview

In Kazakhstan, the agriculture share of GDP was 16.4 percent in 1993, declining to 11.4 percent in 1997, then falling dramatically in 1998 (to 8.6 percent), principally as a result of the Russian financial crisis of August 1998. There was some recovery in 1999 (to 9.9 percent) but this fell back again, in 2000 and 2001 to 8.6 percent and 9 percent, respectively.

In terms of trade, exports of the main agricultural product, grain, fell from 7.9 percent of total exports in 1997 to 5.5 percent in 2000. For similar years, cotton fell from 1.3 percent to 0.9 percent. Export revenue from agriculture, as a share of the total export revenue, was only 0.01 percent in both 1998 and 1999. However, on the import side, the import share of the domestic consumption of many food products was approaching, or in excess of 50 percent. This explains in part the government's increasing concern with import substitution. In 2000, some 82 percent of all fish and fish products were imported, while in 2001, the import share was: 64 percent of meat products, 60 percent of butter, 55 percent of unrefined oil, 4 percent of granulated sugar and sausages, and 37 percent of margarine. While sugar imports increased on the 2000 level, oil, butter, and margarine decreased; meat products and sausages remained at approximately the same level.

The total number employed in the agricultural sector as a whole has been decreasing constantly, from 18 percent in 1997 to 10 percent in 2000, although the figure for 2001 suggests a rise again to 14 percent. The number in agriculture, forestry, and fishery has risen from 22.1 percent of the total employed population in 1998 to 22.6 percent in 2000.) The officially registered unemployed in rural areas has fallen from 97,465 in 1997 to 90,756 and the proportion of women within this from 61 percent in 1997 to 40 percent in 2001.

For the economy as a whole, the average monthly wage has risen from 8,541 *tenge* in 1997 to 14,374 *tenge* in 2000 while the average monthly wage in agriculture was only 45 percent of the economy-wide level in 1997 and even lower, at 39 percent, in 2000. Agricultural workers are slipping further behind in terms of real wages, although this takes no account of income from other sources, including barter and on-farm consumption of farm produce.

B1b. Government policies and programs

There are several basic documents that set out the government's aims and objectives of the agricultural and natural resources sectors. A recent Asian Development Bank review of the Ministry of Agriculture's (MoA) agrarian reform strategies provides the following background information

Development Strategy of Kazakhstan up to the year 2030. The most fundamental policy move occurred at the end of April 2002, with the Presidential statement that a new law on the private ownership of land should be prepared and approved by Parliament by the end of this year, based on the experience of other countries. The current law "On Land" lacks measures which can secure tenure rights in land and inhibits the development of a land market based on the transfer of ownership. It is anticipated that both of these problems will be dealt with in the proposed new law.

The Strategic Plan of Development of the Republic of Kazakhstan until 2010 (December 2001). This plan calls for all sectors to emulate the "East Asian model" (i.e. Japan, Republic of Korea, China, Taipei and the PRC). This specifically entails selection by the government of promising large agro-enterprises or sectors for extensive support by the public sector. For agriculture, the support includes price support for commodities, export subsidies, and funding of research and new technology transfers. The wheat sector is mentioned in the plan as an area with international competitive advantage and potential for more intensive government assistance. The overall goal of this 2010 Strategy is to improve the welfare of the agricultural population through increasing productivity and profitability of production, developing and supporting all types of employment in the countryside as well as through industrialization. In the short term, the strategy seeks to: increase profitability of the agricultural sector and effective state regulation of markets, adopt a protectionist foreign trade policy, create a market infrastructure and an adequate financial system, develop micro-credit programs, and concentrate production through horizontal cooperation and vertical integration. In the medium term, agricultural production is to be intensified to achieve close to average world productivity levels for basic agricultural products, together with the development of processing and services in the countryside and the provision of social services for the agricultural population.

In mid-April 2002, the MoA produced its most recent near-term agricultural strategy, the State Agro-Food Program of the Republic of Kazakhstan for 2003-2005, containing an Indicative Plan for 2003-2005, which is designed to replace the Program for Developing Agricultural Production, 2000-2002. This strategy has been approved by Parliament. According to this strategy, an important goal for the agricultural sector is the establishment of a land market, with the objective to establish private ownership of land.

As implied by the title, the Agro-Food Program shifts the focus towards food security and import substitution. However, it still retains some elements of the earlier program, such as the emphasis on those agricultural sectors that are competitive and the desire to maintain production levels of the main crop and livestock products.

The goals for the sector under this Agro-Food Program are essentially: 1) to ensure food security of the country by a strategy of import substitution, whereby increased domestic supply of higher quality food products will satisfy domestic demand, and 2) to ensure that this improvement in both quantity and quality (the latter to international standards) of food products should also ensure competitiveness in external markets.

The stated aim of the program is: 1) to ensure the food security of the country, 2) to create an effective system of agro-business, 3) to increase the volume of agricultural products and processed products for sale on the internal and external markets, and 4) on the basis of competitiveness, to rationalize measures of state support for agricultural production.

Food quality and safety are indicators of sustainability of the food security system. At present domestic agricultural production and processing does not meet international and often even national quality standards. For example, according to the Republican Sanitary and Epidemiological Service, in 2000 most rejected food products (40-80 percent) were domestically

produced. The rejection rate is even higher for meat and meat products (of 14.7 percent rejected, 82 percent were domestic), for milk and milk products (of 14.5 percent rejected, 79 percent), vegetable oil (of 21.4 percent, 67 percent) and sugar (8.9 percent, 36 percent). The rates for flour, bread, cereals, vegetables and beverages are similar, thus increasing dependence on imports. Agricultural and food production is mainly governed by Soviet GOSTs (state standards), which reduces competitiveness of domestic products.

Much new legislation is before Parliament, has been drafted and under consideration by the MOA and the Council of Ministers, or is being drafted to address many of the ambitious goals of the 2003-2005 Strategy. New legislation and committed reform measures include:

- Sanitary & Epidemiological Service reforms—(move from GOST to ISO)
- Favorable taxes for leasing and agricultural machinery service centers
- State registration of agricultural machinery
- Law on Crop Protection
- Law on Veterinary Services
- Law on Plant Quarantine
- Law on Pedigree Livestock Breeding
- Law on Microfinance and Credit Partnerships

Many of these legislative measures reflect demands from the agricultural sector but also would be necessary to perfect the requirements of the Working Group for Accession to the WTO. Government officials maintain that funds of approximately \$100 million have been earmarked to implement the 2003-2005 strategy, including a number of broad-based programs to implement the proposed legislation. New and expanded agricultural programs include:

- Increased agrochemists/pedologists for soil fertility monitoring
- Increased output of fertilizers
- Seed breeding improvement
- Institutionalizing responsibility for soil fertility responsibility
- Increased state budget for purchase of agricultural machinery
- Increased AgroFinance Corporation capital for machinery service centers
- Manufacture of tractors, harvesters, seed, fertilizer, chemical equipment, and parts
- Government loans for tractor transmission development, diesel engine production, parts
- Support for experimental engineering and design of agricultural machinery
- Increased staffing of plant inspections and laboratories;
- Membership in the European & Mediterranean Plant Quarantine Organization
- Increased research on plant quarantine and livestock breeding issues
- Support for breeding materials for local producers
- Increased inspection of meat and meat processors;
- Annual veterinary diagnosis for Kazakh livestock industry
- Vaccinate 80 percent of livestock; restock veterinary services and laboratories
- Development of pharmaceutical industry for animal products
- Optimization of commodities stock formation, storage and usage system
- Improving agricultural land mortgage and finance to agriculture

- Improve land valuation methodology
- Establish efficient agricultural water use system
- Increase capacity of businesses processing high value crops (complete construction of soybean processing facility)

These measures and programs reflect more of a Ministry wish list rather than an intended program implementation strategy even if \$100 million has truly been earmarked. This list also includes many efforts that should be undertaken by the private sector as it develops products the market demands at prices the market is willing to pay. This list does reflect an active Ministry working toward policy and program issues and reforms that if adopted and implemented will have positive growth effects on the sector. It also reflects a strong interest in the government and Ministry to emphasize agricultural sector development and growth. Some Ministry officials, though overwhelmed by the task, are dedicated to developing quality approaches and solutions to improving the agricultural sector, and welcome technical advice on the best approaches.

MoA Strategy on land reform

After gaining independence, the government started to put the responsibility for on-farm irrigation into the hands of farmers. This happened rather too quickly, without broader support framework for the new generation of farmers, who really were just land shareholders (former *kolkhoz* or *sovkhoz* workers), lacking farming experience. The legislation allowed for short-term lease or land use rights rather than ownership. The Law of the Republic of Kazakhstan "On Land" #152-II of January 24, 2001, abrogated the right to permanent land tenure of non-state users and institutionalized long-term temporary leases for terms up to 49 years.

Kazakhstan is slowly moving ahead with land reform at its own measured pace. Some underlying tenets appear to support the glacial pace of land reform:

- A fundamental belief among many officials that large farms must be maintained to generate efficient, competitive grain production
- That agricultural land must be maintained for Kazakhs and therefore, the government must maintain ultimate ownership control giving individuals only lease rights
- Large grain firms that do not want the farm management/leasing operations that produce most Kazakh cereal grains to be fractured into small farm plots characterizing the farm privatization patterns of neighboring countries.

These tenets appear to override a fundamental agricultural financing tool—mortgage on land to finance both production credit, as well as equipment, machinery and capital improvements on the land for higher quality, more efficient production. Most of the large farming operations appear able to obtain the production and long term financing they need through direct bank loans or loans secured by warehouse receipts. Smaller farmers neither have knowledge financing methods that may be available, access to financial institutions that may consider financing them, nor sufficient collateral beyond their land mortgage rights to support the loans that they need.

The trend of creating individual farms by breaking down the large cooperative farms and agricultural enterprises continues and the new independent farms are showing rising land productivity, often double than the cooperatives. From 1997 the land area controlled by the agricultural cooperatives fell from 81 percent of the total to 68 percent in 2001. More than one third of grain, over one half of meat and two thirds of cotton is produced in these individual farms. The agricultural land under irrigation command represents only seven percent of the entire land surface of Kazakhstan and covers 2,364,800 hectares, currently providing approximately 30 percent of gross agricultural output.

The northern *oblasts* (not part of the Aral Sea Basin) grow mainly wheat, which is mostly rainfed, but in the southern *oblasts* (cotton, wheat, rice, vegetable, fruits and industrial crops), irrigation is necessary. Overall, the productivity of the agricultural lands plummeted to almost half of what it was before independence. This can partially be contributed to the slow pace of reforms, but also to the deferred maintenance of the irrigation network and former intra-farm canals (which have become inter-farm canals after the break down of the large cooperative farms into smaller holdings), as no organization was responsible for keeping them in good working order. In some *raions* the land reforms were poorly executed and parts of the irrigation systems became a "third party" property, thus difficult to realize the new approach to irrigated land management.

Problems identified in the strategy. From January 1, 2003 temporary long-term tenure will negatively affect the situation of a certain part of agricultural producers. The government has recognized lately that support for the agricultural sector is needed, which is evident in the 2003-2005 plan for development.

- The lack of private property on land is one of the constraints for development of mortgage relations and for increasing investments into agriculture.
- The lack of sustainable land relations discourages middle and large commercial farms.
- The lack of updated land quotations (the latest full scale land quotation was undertaken in 1986-1987) deters realistic evaluation and differentiation of land tax rates.
- The lack of economic motivation to increase the soil fertility, as well as efficient soil fertility monitoring, diminishes responsibility of land users for proper use of land.

Proposed land reform measures. The newly redrafted Land Code considers land ownership rather than the land use right, therefore providing more incentives for farmers and increase of land productivity.

- Legislating private property on agricultural land
- Institutionalizing responsibility for inefficient use of land encouraging preservation and increasing fertility of agricultural land
- Review of compliance of land distribution with the existing legislation

- Improving land evaluation methodology: four-stage land quotation in all regions, differentiation of capitalization ratio for all soil types and sub-types under the existing status of the country's economy
- Improving financial and credit relations in the agricultural sector involving land and land tenure secured mortgage through credit mechanisms

Expected outcomes: Inclusion of land in the market turnover, increasing access of agricultural producers to credit resources, improving land use, preserving the preferential tax regime.

At this writing, not all of these issues were effectively addressed in the draft land code under review by the *Oliy Maglis*, which has been backtracking against some of the proposed land reform measures. The law is expected to be approved this summer.

MoA strategy for water sector reform

Problems in agricultural water use include: 1) a lack of legislative framework regulating agricultural water resource use and ownership of irrigation facilities; 2) high tariffs for water supply services farms in the southern *oblasts* of the country have accumulated arrears thus causing losses for business entities providing services to agricultural water resource users; 3) output of irrigation systems constitutes only a half of the standard due to the high degree of wear and tear of irrigation facilities; and 4) dependence of water supply in southern *oblasts* on regulation of interstate sharing of trans-boundary rivers.

Proposed measures to improve the water resource system include: 1) development of new version of the Water Code of the Republic of Kazakhstan including norms for establishment and functioning of water users associations; 2) state support to rural water users through subsidies from the Republican budget to cover the gap between non-recoverable cost element in the water supply services provided by state-owned water resource operators to ensure their profitability; Rehabilitation of the most damaged sections of inter-farm channels and irrigation and drainage facilities; 3) establishment of the "Kazagromeliovodkhoz" methodological centre in the form of state-owned entity with the mandate to monitor the status of irrigation systems, to design construction of sections of irrigation systems; 4) incorporation into the state training program annual training of 20-25 hydro-technicians and waterworks construction engineers; and 5) establishment of inter-state water and energy consortium of Central Asian countries.

Leasing

Agricultural leasing was first permitted by Presidential decree in December 1995 and was very close to the Russian Regulation on Leasing adopted earlier in that year. Today's leasing activities are governed by several sections of the Civil Code devoted to leasing, allowing leasing of land, buildings, structures, machinery, equipment, inventory, transport vehicles, and other non-consumable or non-natural resources. The civil code authority is complemented by the Law on Financing Leasing adopted in July 2000. These laws define leasing as a transaction in which the

lessor purchases an asset selected by the lessee for use by the lessee for commercial purposes for a definite lease term. In addition, one of the following transaction classifications must be met:

- The leased asset is transferred to the lessee at the end of the lease for its fair market value or the agreed price established in the leasing agreement;
- The lease is for not less than 80 percent of the economic life of the leased asset; or
- The present value of the lease payments at the beginning of the lease term should be no less than 90 percent of the value of the leased asset.

Other characteristics of leasing in Kazakhstan include the following:

- Leasing agreements must be registered with the government; if the leased asset is movable property, then the leasing agreement must also be registered at an additional government registry for pledges.
- Leasing does not require a license from any licensing authority, except when a bank or other lending institution engages in leasing. Bank and nonbank institutions must have a license to conduct leasing operations as a separate banking operation.
- Lease agreements must be in writing and include all terms and conditions of the lease including, at a minimum:
 - o The lease term;
 - o Complete description of the leased assets;
 - o Amount and frequency of lease payments;
 - Value of the leased asset:
 - o Repair, maintenance, and insurance of the leased asset;
 - o The terms of delivery of the leased asset;
 - o Registration of the leased asset with all appropriate authorities;
 - The rights and obligations of the lease parties, including the process for monitoring the lessee's use of the asset; and
 - o Default and remedy provisions.
- Subleasing is permitted with authorization from the lessor.
- Lessee can work directly with the supplier or manufacturer of the equipment to address any issues of quality, delivery and installation, or warranty.
- Lessor cannot sell the leased asset to a third party unless that party becomes the lessor of the continued lease of the equipment to the lessee.
- Insurance is not obligatory, but the agreement must assign responsibility for insurance of the leased asset.

Importantly, the Kazakh law provides the lessor with the best out of court repossession procedures of all CAR countries upon the default. The lessor has the uncontested right to repossess the leased asset with a 10 day period:

- If the lessee defaults on two consecutive lease payments;
- If the lessee uses the asset contrary to the purposes of the agreement or the normal uses of the asset; or
- If the lessee restricts a lessor's access to the leased asset;

For tax purposes, the tax authorities view financial leasing operations as a purchase of fixed assets by a lessee. The leased assets are carried on the balance sheet of the lessee. The lease assets are subject to depreciation only if the lease meets one of the following conditions:

- The lessee has the right to purchase the asset at a price fixed in the lease;
- The lease term is for at least 80 percent of the economic life of the leased asset;
- At the outset of the lease, the net present value of the minimum lease payments is at least 90 percent of the fair value of the leased asset; or
- The depreciated value of the leased assets at the end of the lease is more than 90 percent of the then fair market value of the leased assets.

The Kazakh Tax Code exempts lease payments from VAT. However, importers must pay 16 percent VAT upon the equipment going through customs and there is no provision for rebate of the VAT once the equipment is placed into a leasing transaction. The basis or book value of the equipment is increased by the amount of the VAT.

Lease payments are viewed as credit or loan payments to the lessor having an interest and principal component. The interest component is deductible within the interest expense deductions: the official refinancing rate of the NBK plus 50 percent for loans in *tenge* or the LIBOR plus 100 percent for loans in foreign currency. The amounts in access of this limitation are added to net income and taxable. This complicated tax formula is intended to limit borrowing, particularly external debt.

B1c. Commitment of government to initiating and implementing reform

In a region historically known for low output, the GOK's challenge is to shape government policy in a manner that maintains its impressive economic growth and continues to elevate the welfare of its people across the nation. The government intends to support the development of the agricultural sector to help diversify the country sectorally and geographically. Initially, the government transformed the former Soviet government management and control practices by redirecting the function, strategy, and policy of government. Now the government itself must

strengthen management to undertake its transforming from controlling the economy to setting the rules for facilitating economic growth and enforcing them impartially.

The government knows these challenges and has gradually provided rough blueprints on how it will deal with them. The GOK announced its Long-Term Strategy of the Development of the Republic of Kazakhstan Up to the Year 2030 to have a fully democratic state and market economy in 30 years. Medium term strategies for attaining these 30-year goals are provided in the Strategic Plan of Development of the Republic of Kazakhstan up to the year 2010. The main task of the program is the creation of favorable conditions for economic and business growth, including:

- Balanced and stable fiscal and budget systems
- Increased domestic demand based on enhanced living standards
- Technological modernization of functioning enterprises
- Increased output in the agricultural sector and development of competitive productions and sales of agricultural products
- Development of managerial, engineering, and technical capabilities
- Expansion of the service sector and its increased competitiveness
- Development of the service sector and its increased development
- Balanced economic development of the region.

These long and medium-term strategies are reflected in the president's declaration in 2002 that the years 2003 to 2005 will be the Years of Rural Development. This declaration was followed by the more short term GOK Agriculture and Food Action Program for 2003 to 2005 demonstrating a renewed commitment to market reform and trade regime strengthening and development. The State Agricultural and Food Program for 2003 to 2005 provides an ambitious agenda for revitalizing many areas of institutional reform that if accomplished will help facilitate growth in the industry. Legislative initiatives and policy programs discussed above lay out some of the government intentions. Though these initiatives and programs are described in summary fashion, government officials state that these are serious intentions backed by budgetary resources approved by the Parliament. Although the GOK will continue developing three-year programs on a rolling basis, this three-year strategy is expected to be re-visited in three years for additional institutional strengthening accompanied by declining direct and indirect budgetary support to agricultural production. The GOK expects to accede to the World Trade Organization (WTO) at the end of six years, which will generate additional requirements and limitations on budgetary support for agriculture. Meeting the goals and establishing many of the programs will support the institutional direction that the Ministry of Agriculture needs in order to meet the requirements in the agricultural sector for WTO accession. Other budgetary direct and financial support for the agricultural sector takes government policy away from the ultimate trade regime

approach espoused by the WTO but also may addict the sector to new government support that largely disappeared after the end of the Soviet Union. The budgetary support, if not carefully executed and appropriately withdrawn as the sector revives into new growth, may place too many of the sector's resources in less efficient hands while reducing the total amount of debt and equity capital invested in the sector.

B1d. Primary agriculture (production)

While the number of private farms has been increasing, consolidation of private farming can be expected over the next few years if the new law on private ownership of land is adopted. There were only 2,500 private (peasant) farms in 1991, increasing to 31,100 in 1995. By 2000, the number had increased to 105,100 and this trend continued to increase and totals about 122,400 farms by the end of 2002.

With regard to the profitability of private farm operations, most farms operate at a very low level of efficiency. It has been calculated that the average farm, for instance, produces only about 50 percent of potential output. The government classifies farms according to three groups: farms which are in sound condition and require no special restructuring efforts; farms which, although facing financial problems, have reasonable prospects of recovery given appropriate support; and farms which cannot be salvaged as viable entities and which should be prepared for, and submitted to, bankruptcy.

Some 35 million hectares of Kazakhstan land are under arable crops with cereals being cultivated on 23 million hectares. Per capita, there are around 12 hectares of agricultural land and over 2 hectares of arable land. The dominant crops are wheat, oats, barley, and industrial crops (flax, sunflower), as well as cotton, rice, sugar beets and tobacco in the south of the country. There are also considerable numbers of orchards and vineyards, as well as vegetables, melons, and gourds.

Kazakhstan was one of the largest grain producers in the former Soviet Union. Currently, Kazakhstan share in the world's grain production amounts to about 1 percent to 1.4 percent of world exports. After a decade of continuous reductions, the 2000 area under production increased by 6 percent compared to 1999. On average during 1999-2001, 13.9 million tons of grain was produced in the country—1.4 times higher than the average for 1996-1998. Corn crop capacity for the reference periods increased from 6.9 to 11.5 centners per hectare. The situation with production of industrial crops, potatoes, and vegetables is similar. Review of the crop pattern in recent years shows that in 2001 the general sown area was 1.5 times less than in 1996, with the share of grain crops in the total area under crops increased from 67 percent to 79 percent. With an increasing share of wheat in production the percentage of land under cultivation for bean-crops, other cereals, forage grain, and fodder crops diminished. For example, in a recent year: the area planted in sugar beets was reduced by 1.6 times and stabilized at 19.7 thousand hectares; sunflower has stabilized at 220-250 thousand hectares; cotton area increased 1.7 times due to high profitability of the given crop and availability of the market; and the trend for planted areas of fruit trees and vineyards is decreasing.

The annual yield of grains remains significant for the economy of the country. For example, in 2000 11.6 million tons of grain were harvested, of which 78.5 percent was wheat, 14.4 percent was barley, and 7.1 percent were corn, rice, millet, buckwheat, oats and others. The share of

grain production in terms of total farm production decreased from 48.3 percent in 1999 to 42.2 percent in 2000, while the share of vegetables increased from 15 percent to 19.2 percent.

The weakness of the country's position in the world grain market was mostly caused by the decreased grain production. Nevertheless, grain remains one of the main export commodities of Kazakhstan, accounting for 6.5 percent of total exports in 1998. Kazakhstan exports wheat, barley, rice, rye, maize, and buckwheat, but wheat alone accounts for 88 percent of all grain exports.

The Kazakhstan grain market has good potential for further development. First of all, the country has rich land resources: more than 223 million hectares or 74 percent of the country's territory is suitable for agricultural production. The natural and climatic conditions in Kazakhstan are highly favorable to grow a variety of crops. However, strengthening of Kazakhstan position in the world grain market will require enormous investments into the agrarian sector, which will be directed to the extension of crop areas and the development of crop growing technologies.

Problems identified by the MoA in crop production include: 1) the existing grain-crops pattern taking into account regional soil and climatic conditions and market conditions does not provide for sustainable and competitive agricultural production; 2) recommended crop rotation patterns are not followed; 3) high profitable crops are not being introduced (safflower, soybean, leguminous plants); 4) soil fertility continues to degrade; 5) field forage production is underestimated; 6) insufficient rehabilitation and expansion of fruit orchards, vegetable production, and planting of new vineyards results in a shortage of raw materials for the processing facilities.

Livestock

Livestock production is a traditional and dominant agricultural sub-sector. No less than three quarters of all agricultural land is used for grazing. Sheep breeding is predominant, while cattle, pigs, horses, and camels are also produced.

In 1997 livestock production made up 40 percent of the production value in agriculture in Kazakhstan. By 2000, meat and milk production constituted about 89 percent of total livestock production. Agricultural enterprises decreased their meat production by 70 percent, peasant farms by 1 percent, and households by 2 percent. The share of household meat production reached 88 percent of the total. Milk production in 2000 increased by 6 percent compared to the previous year, eggs' production by 12 percent, and sheep wool production by 3 percent.

In 2001 livestock production increased by 6.6 percent compared to 2000. An increase in livestock production has been observed in all categories of farms. This was mainly due to enhanced household activity, following several years of decline. As of April 1, 2001 about 87 percent of total cattle were raised by households.

Since 1998 the number of livestock and poultry of all types has stabilized. In 2001 the number of cattle had increased by 8.5 percent (including cows by 6.3 percent), sheep by 9.7 percent, pigs by 26 percent, camels by 8.3 percent, and poultry by 24.4 percent, with the number of horses remaining at the level of 1998. The government believes that the existing livestock output is

adequate to the effective demand at the internal market. Market capacity is limited and conditioned by purchasing power of the population. Therefore certain types of animal production are oriented to the internal market – dairy products, poultry, pig, and horse products.

Farm equipment

The existing level of agricultural equipment and machinery is the major constraint for the efficient development of agricultural production, causing simplification of agricultural cropping, pest prevalence, and ultimately reducing product quality. The average age of the existing tractor and harvester fleet is 13-15 years with the design service life of 7-10 years.

From 1994 to 1999, agriculture received practically no new machinery. In the past three years 7,279 units of machinery were purchased partially funded from the government budget. Of those, 1,193 were tractors and 2,388 harvesters, representing a minor improvement in the quality the total Kazakh agricultural equipment.

Due to the lack of appropriate machinery many small and medium agricultural producers cannot cultivate their land. The limited asset base of agriculture producers and their lack of liquid collateral constrain producer access to credit resources. Service centers and machine and tractor stations lack both technology and equipment.

Proposed measures by the MoA include: 1) funding purchases of domestic and imported equipment and spare parts for leasing to agricultural producers; 2) development and implementation of pilot projects for establishment of efficient forms of service centers and machine and tractor stations at the initial stage; 3) creation of favorable tax for leasing of agricultural machinery and encouraging the development of service centers and tractor stations.

Market information

The Market Information project, based at the MoA and assisted by EU TACIS, is designed to collect information on products and prices (and assistance with interpreting such data) available to farmers at *raion* level, which should enable them to make better informed and more up-to-date judgments on what, where and when to market. However, this also may require government assistance with infrastructural funding, especially in such areas as rural roads, transport, storage, and communications, to facilitate the development of the market infrastructure for private companies.

B1e. Agribusiness (food processing)

During the 1990s, Kazakh food processing facilities processed over 61 percent of milk and 71 percent of meat produced. Due to a decline in processing, agricultural producers have to sell unprocessed milk and livestock on the internal market. Up to 92 percent of the milk and 85 percent of the meat products are sold unprocessed.

The main current problems are in processing and distribution where there is little competition and a small number of relatively large firms (e.g. input suppliers, wholesalers, and traders). This is partly because the government continues to assume a role in the distribution of agricultural

products through budgetary support to a number of state owned enterprises in different subsectors (e.g., grain and livestock), in line with the government's overall policy to rebuild the agricultural sector. The government also intervenes to procure agricultural products for the State Reserve, information on which is confidential. Such market intervention (and price subsidies) may act to depress prices and negatively impact on local production, thus counteracting other measures, which are designed to spur market development.

Financing the Agricultural Sector

Financing the Kazakh agricultural sector during the past decade has been very difficult due to the transition and transformation of the sector to a market economy. The transition has been slow with the most important capital resource—land—still not privatized in a manner that facilitates optimal commercial use. Product and commodity markets have been both volatile and trending lower causing producers to rethink production decisions and land use. The acreage for wheat production has dramatically plummeted during the past five years only to rebound at a much lower level. Lower land use is only exceeded by the dramatic drop in the use of fertilizers and crop protection chemicals resulting in very low yields. Most agricultural machinery is approaching 13 to 15 years of use, and each additional year lowers total revenue with higher maintenance and fuel costs, lower efficiency, higher operational disruption, and lower net postharvest yields. Since Soviet times, there has been significant decapitalization of the agricultural sector. Markets for Kazakh agricultural products have waxed and waned without a concerted effort to develop strong new ones. Even Russia, a traditional customer for large quantities of grain, has reinvigorated its own productive capacity diminishing its dependence on grain imports. Government policies have gone from the full support and management of the agricultural sector in Soviet times to very little support and now to plans for strong programmatic and budgetary support. The net result is a volatile agricultural industry that discourages new investment.

Financial institutions have a very difficult time financing a sector that has volatile and uncertain production and revenue yields, does not have the long term capital or management base for overcoming these business issues, and does not have very much collateral to enable a bank to recover loan principal and interest in the event of default. Commercial banks everywhere have competing business opportunities to finance and generate interest and fee income. For banks to become more comfortable in financing agriculture, its capital base, management, yields, revenues, and product demand must all increase. There are some bright spots on the policy and economy horizon that may encourage bankers. The new draft Land Code going through the legislative process may provide valuable positive changes enabling fresh debt capital to flow to agricultural production, depending on its final provisions. The GOK 2003 to 2005 strategy emphasizes revitalization of many policy and program areas that are important to a healthy growing agricultural economy—plant inspection laboratories, improved seed research and multiplication, improved veterinary services, improved livestock breeding, and similar agricultural sector support. On the economic front, food and food product imports are declining as domestic food processors and agrofood enterprises grow and develop more and better products.

The difficult transformation of the agricultural sector has occurred at the same time that energy, consumer goods, construction, and general trade has experienced strong growth. A growing and

strong financial sector has helped fuel that growth. Since January 1999, Kazakh banking assets rose from \$1.5 billion to \$8 billion.² The National Bank of Kazakhstan has developed a strong fiscal operational system and bank supervision aiding the development of commercial banks in accordance with sound banking principles. Bank supervision is very active in onsite and offsite examination and follow up supervisory actions, which are effective and enforced. Through a series of bank management training programs, many supported by international donors, Kazakh banks developed strong commercial lending programs. Bank management is growing in commercial and corporate lending spurring the growth of the Kazakh economy. Private pension funds have risen to \$2 billion in assets. Insurance companies are on the rise. The capital markets are growing in breadth and depth providing individual, banking, and corporate investors with a wide variety of mortgage and debt securities. In short, the Kazakh financial sector is competitive, operating on a sound business basis, fully skilled and capable of financing any commercial business, and having capital assets that they must put to work in interest bearing and income earning assets.

The financial community's interest in and knowledge of the agricultural sector has been growing much more slowly. Several donor programs have aided bank understanding of the agricultural sector. The World Bank Agricultural Post Privatization Project, for example, provided about \$15 million for onlending to agricultural producers. This program worked with seven Kazakh commercial banks, which developed loan portfolios from \$1 to \$2 million from the World Bank funds. Loan officers and managers of participating banks received training on agricultural credit analysis. Little additional lending occurred from the banks' own funds in expanding the banks' agricultural loan portfolios. Also, the program has been delayed in being implemented due to problems in developing appropriate agricultural target borrowers. A new WB onlending program is being developed that anticipates correcting past inefficiencies.

EBRD has established a commercial onlending program for the same banks for loans to agricultural producers and the grain industry secured by warehouse receipts. Though the \$110 million loan program has not been tapped due to the lack of an established and funded indemnity or guarantee fund, banks and their loan officers received substantial training from the USAID warehouse receipts program. This training program had a strong impact on warehouse receipts financing. Despite the absence of an indemnity or guarantee fund, the Kazakh grain industry is depositing nearly one third of the annual harvest in public warehouses and using warehouse receipts as security for loans or title documents to transfer grain to buyers. The strong liquidity in the Kazakh banking system does not yet require the EBRD loan resources to finance the grain industry. This is one of several indicators showing that the financing of the agricultural sector is not an issue of lack of funding. Credit analysis and risk management capabilities appear to be a greater constraint along with the perceived level of risk of making agricultural loans.

The EBRD-financed Small Business Program helps to upgrade the banks' credit analytical and risk assessment capabilities through its \$175 million onlending program for small businesses. These resources are available to commercial banks for financing micro and small businesses in Kazakhstan on loan amounts from \$100 up to \$200,000 with interest rates from 1.3 percent to 2.9 percent per month depending on whether the loan is denominated in US dollars or Kazakh *tenge*. This program operates throughout the country in approximately 120 outlets through seven

² All monetary units are expressed in US dollars unless noted otherwise.

partner banks. TACIS, USAID, and the Japanese government have supported the German consulting firm IPC, lead operations and training programs that help develop bank loan officers' small business lending skills and bank operational systems to support a strong small business lending program. The Small Business program is increasingly looking at the food processing and agricultural production areas for testing for new loan growth. The program will slowly develop appropriate scoring models for each segment of the agricultural sector that it finds attractive for financing.

The Kazakh government, frustrated at the lack of commercial financing to the agricultural production sector, organized and established two government corporations whose sole financing authority is restricted to the agricultural sector—Credit Corporation of Kazakhstan (CCK) and the Agro Finance Corporation of Kazakhstan (AFK). The CCK is a government corporation with regional subsidiaries loan funds to local retail entities called credit partnerships for lending to agricultural producers.³ The CCK borrows its funds from the Kazakh government budget that must be repaid. The local partnerships are privately established and capitalized partially with private funds and partially government funds. The loans to agricultural producers to farmers are somewhat subsidized due to the low cost of the government loans to the local partnerships through CCK. CCK and the local partnerships operate under a special dispensation from the NBK.

The AFK is a government-established leasing company to lease agricultural machinery—tractors, combines, harvesters, and farm implements—to creditworthy agricultural producers. The AFK, like the CCK, is funded from government budgetary sources. The corporation has been given the goals of developing commercially based leasing company favoring regionally produced agricultural machinery—Russian, Belarus, Ukrainian—to creditworthy agricultural producers. AFK has \$80 million from the government for leasing agricultural equipment and has committed approximately \$45 million to date.

While these agricultural credit facilities appear at first blush as the government becoming the nation's banker of agricultural producers, this is not really the case. CCK has a strong element of involvement of the private sector conducting the lending operations while the government maintains control over intermediation of the government budgetary funds. AFK is leasing on commercial terms though it is staffed by the government. These government financial institutions understand that they will be privatized over time though their corporate financing authorities may be restricted to agriculture and the rural sectors. They are both targeting medium to small farming operations that do not have as easy access to commercial bank financing as large farming operations, which are also more likely to be able to use warehouse receipts or other collateral to support their loans. These lending operations appear like the interim financing

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³ The CCK federated structure is very similar to the initial structure of the US Farm Credit System when it was established in 1916. The primary difference is that the local retail associations in the US system were established as cooperatives with farmers purchasing stock to capitalize them and electing their boards. The Kazakh structure of private companies avoids the conflict of interest of the US farmer borrowers electing the directors that managed the lender. The US Farm Credit Banks issued government agency securities secured by agricultural real estate mortgages of the association loans to farmers. A similar debt funding structure could be established in Kazakhstan providing for loanable funds to grow their loan portfolios. The bond pricing would establish a market priced cost of funds for CCK and avoid the deleterious effects of subsidized agricultural lending. This would also involve greater private financing for agricultural production driven by market forces competing for investors' funds rather than government budgetary sources that can be politically encouraged by powerful political lobbies to devote more budgetary resources to agricultural lending.

options that they purport to be. They are relatively small and can only finance a small portion of the potentially large market that the medium and small agricultural production and processing market represents. These institutions can be the pioneers that develop the approaches for financing Kazakh agricultural production safely and do the hard work of learning who the creditworthy and commercially capable producers are. To accomplish this, however, they must be operated on a sound business basis. Over time other Kazakh commercial banks will enter this market after they see that good returns are possible.

Today, the Kazakh financial sector has substantial liquidity to finance economic growth from any sector. All of these financial institutions must find income-generating loans and other investments for their funds. As creditworthy opportunities in other sectors become more difficult to find, commercial banks will turn to the agricultural sector. Commercial banks are providing loans to food industry and agricultural producers though actual loan volumes are not known, as banks do not give detailed information on their portfolios. Agricultural loans to producers appear to be focused more on larger and medium-sized producers that have demonstrated a strong business and revenue history as well as have sufficient collateral to support a commercial bank loan. For banks to expand their loan portfolios in the agriculture sector, particularly in production, some of the sector's fundamentals must improve, i.e., the ability to buy, sell, and mortgage agricultural land, stronger markets for crops and livestock, and better manager with good technical knowledge. Banks may expand their lending in agro-industrial and food processing areas as they learn more about the underlying economics of each market segment, such as dairy and mill processing, oilseed processing, juice and beverage production, fresh and processed fruits and vegetables, and meat processing, to name a few.

Banks are watching the government's entry into financial agriculture to see how many loans are made at what rates and the repayment experience. The lower the interest rates, the fewer the foreclosures on defaulted loans, the higher the total loan volume and the broader the geographic coverage will likely result in lower interest in commercial banks serving the market. For the most part, commercial banks generally prefer to let government institutions finance most agricultural production. In this way, commercial bank can finance the less risky agro-processing industries, but be reasonably assured that farmers receive financing to produce inputs for agro-processing. Bank financing to the agro-processing sector is still small but has room for expansion

To accelerate this process, Kazakh commercial bankers need specialized training in the credit needs, revenue and cash flows, and lending techniques appropriate for all segments of agricultural lending. They need additional training in financing the agro-processing, packaging, storage, transport, and retailing industries. They need some assurance that the government financing operations will end with the privatization of the government corporations. This will encourage bankers to spend the time, effort, and capital resources to develop agricultural and food industry lending expertise. Thus, the government needs additional technical assistance on the long-term policy and agricultural financial market implications of continuing to operate CCK and AFK or privatization of these entities to make room for and encourage the banking industry to move into the lending that these corporations have pioneered.

B1f. Water resource management

Water Legislation

The vague laws concerning water use in agriculture and unclear policies governing irrigation remained for several years after independence, resulting in uncoordinated use of surface and groundwater. The initial lack of understanding and political will to support any changes in irrigated agriculture and development of rural water institutions has kept the development at a standstill. The basin organizations (BVUs) that used to have control over water use in the eight basins became weak, with no financial resources or personnel. Priorities and practices in agricultural allocations had no legal basis, complicated at the *oblast* level by a typical proliferation of agencies.

The basic language for enabling establishment of water users' organizations is contained in the Civil Code, and a law of 1999 No. 450, providing for creation of Consumers Cooperatives. Supplementary to this, a Presidential Decree called for Rural Consumers Cooperatives (RCC) in 1999; this resembled an organization of agricultural water users. The Law was vague enough for the cooperatives/associations to be formed and function as non-commercial entities taking up distribution and maintenance of irrigation and drainage systems.

The Government's political support for agriculture and rural institutional development is more evident lately. After three years of discussions, finally, a Law on Rural Consumers Cooperatives of Water Users (RCCWU) has been passed in April 2003, allowing the RCCs to function legally as water users, with the relevant organizational structure, having clear rights and duties, and a relationship between the cooperative and the water users. According to the law, the RCCs need to re-register as RCCWUs within six months of passage. Additional government support is demonstrated by a new draft of the Water Code, which is under consideration and expected to pass this summer.

Status of Irrigated Lands

The table below shows the breakdown of agricultural and irrigated land for 2001. From over 2.3 million potentially irrigated hectares, only about 65 percent were actually irrigated, while the rest had deteriorated irrigation infrastructure, suffered from increased salinity and water logging, shortage of water, and problems in the organizational arrangements. Continued lack of financial, material, and technical resources caused a great part of the agricultural land to fall out of irrigation and production.

Table 1: Status of Irrigated Lands 2001, in thousands of hectares.

Oblast	Land with irrigation command in 1991	Irrigated in 2001			Irrigated land not used in 2001				
			Including		i	Including			
		Total Under Not Total crop under crop	Total	Defunct irrigation system	Lack of water	Degraded soil status	Lack of funding		
Akmola	46,5	4,4	4,4		42,1	36,4	2,0		3,7
Aktobe	48,8	8,2	8,2		40,6	26.3		4,1	10,2
Almaty	648,3	544,8	445,0	99,8	103,5	38,2		65,3	
Atyrau	4,6	4,5	3,7	0,8	0,1				0,1
E. Kazakhstan	219,1	54,5	54,5		164,6	66.5		30,7	67,4
Zhambyl	284,7	239	216,2	22,8	45,7	30,7	13,0	2,0	
W. Kazakhstan	11,1	11,1	11,1	1,0					
Karagandy	87.7	3,8	3,8		85,4	65.2		14,2	6,0
Kzyl-Orda	277,7	173,7	141	32,7	104,0	58,5	17,2	28,3	
Kostanaj	145,9	6,3	6,3		139,6	10,0	82.9		46,6
Mangistau	1,3	0,2		0,2	1,1	1,1			
Pavlodar	12,9	4.6	4,6		8,3	8,3			
N.Kazakhstan	17,7	0,3	0,3		17,3	12,7	4,6		
S.Kazakhstan	558,6	471,9	418,7	53,6	86,7	30,2	14,6	29,0	12,9
TOTAL	2364,8	1525,8	1317,8	208,0	839,0	384,1	134.2	173,6	147,0

Source: The Government plan for 2003-2005

In Almaty and South-Kazakhstan O*blasts* 70 percent of arable land is irrigated. In Almaty O*blast* there are 754 relatively large enterprises, 663 with arable land, out of which 240 enterprises (or 36.6 percent) have arable land of up to 200 hectares, 135 (or 20.4 percent) have arable land of 200-500 hectares, 273 (or 41.4 percent) have arable land of 500-10,000 hectares, 9 (or 1.4 percent) have arable land of 10,000-20,000 hectares, and 3 enterprises (or 0.5 percent) have arable land of more than 20,000 hectares.

In South-Kazakhstan O*blast* there are 1419 enterprises, 1168 enterprises with arable land, out of which 843 enterprises (or 59.4 percent) have arable land of up to 200 hectares, 280 enterprises (or 19.7 percent) have arable land of 200-500 hectares, 292 enterprises (or 20.6 percent) have arable land of 500- 10,000 hectares, 3 enterprises (or 0.2 percent) have arable land of 10,000-20,000 hectares, and 1 enterprise (or 0.1 percent) has arable land of more than 20,000 hectares.

In the zone of non-irrigated farming, fifty six to seventy percent of enterprises are big farms with arable land of 500- 10,000 hectares, and 19- 27 percent of the enterprises are very big farms with arable land of more than 10,000 hectares. In the irrigated zone fifty eight to seventy nine percent are small enterprises with arable land of less than 200 hectares and 200-500 hectares, 21-41 percent are medium farms with arable land of 500-10,000 hectares, and only 0.1-0.5 percent are large farms with arable land of 10,000-20,000 hectares.

The removal of state control over cropping pattern choices has provided opportunities for farmers, although the market still needs to be more developed and farmers need experience. The newly emerging farmers need to learn new agronomic and irrigation skills, as well as skills in

managing an enterprise and dealing with different organizations which are also undergoing transition. The agricultural research institute in Taraz, which has been well known for quality work (research on production of irrigated crops and associated problems of soil salinity for variety of crops and fruits as it affects production), was able to keep research staff and continues to work even though the lack of finances has constrained the scope and extent of activities. The institute offers an opportunity to coordinate various training programs with the local university, which has recently expanded its subjects of study.

There is evidence of substantial loss of skill from irrigation; recruitment of young staff to manage canal systems is difficult as the wages from other employment are superior. Also, other specialized skills in the community are considered lost, as these specialists (e.g., veterinarians) may have become full-time farmers. The Government Strategy for IMT focuses not only on the on-farm systems of the former large cooperative farms, but also on taking over the inter-farm canals that are transferred (especially in the South Kazakhstan O*blast*) under trust management to a Rural Consumer Cooperative (RCC) or federations of these.

Water Resources / Irrigation

Most major rivers in Kazakhstan are international waterways requiring multinational management arrangements. The Southern *oblasts* are dependent on water supply from the Syr-Darya, which is being regulated on the basis of the interstate agreements. Under the international agreements, the Kazakh government is obligated to share the costs of maintaining the SyrDarya infrastructure system and funding the interstate organizations. The interstate agreements are rather complex, linking releases of water from the Toktogul reservoir in Kyrgyzstan to trading of commodities such as delivery coal to and purchase of electricity from Kyrgyzstan.

Surface water in Kazakhstan is comprised of an estimated 100.5 km³, out of which 56.7 km³ originates on the territory of the Republic; the rest comes from Central Asian states, the Russian Federation and China. The required consumption quantity is estimated to be 54.5 km³, while the average annual quantity available for economical consumption, excluding losses, which meets ecological, sanitary, and transport-energetic requirements, does not exceed 46.0 cubic kilometers. In low water years, the total volume of the water resources can be reduced to 58 km³, and the available amount of water is consequently reduces to 26 km³. In addition, the resources of surface water are distributed unevenly, which increases transportation delivery costs.

As a result of poor quality of irrigation water, many lands are saline, especially in the Kzylorda *oblast* and need to practice leaching. In this *oblast*, as the most downstream on the Syr-Darya, the drainage water is being used and mixed with the river water, especially in the low water years, which of course does not help the water quality going to the Aral Sea.

Groundwater is not used in Kzylorda O*blast* much for irrigated crops, but more as communal potable water sources, for flooding of pastures, industry, and rural water supply. In South Kazakhstan O*blast* underground water sources are being utilized for irrigation, as well for other sectors, but mainly as potable sources.

There are 623 developed water wells with a total operational reserve of 15.8 km³ (12.68 km³ of which is sweet water). Of those, 494 deposits of underground water have been developed directly

for drinking, with a total reserve of 6.13 km³. The underground sweet water is under-utilized; 330 deposits are exploited, the total water rotation making up about seven percent of the developed reserve, or 1.7 km³. The underground water used for drinking is 65.2 percent of the total; the amount of surface water used for drinking is about 0.29 cubic km³.

Consumption of water for economic and household needs by the population takes legal precedence. In 1999, that was approximately 0.83 km³; urban population consumed 0.65 km³, and rural population consumed 0.18 km³ (which makes 4-6 percent of the total consumption by all the sectors of economy).

Also, some ecology problems as a result of regulating rivers have come to the fore in the last few years; the rivers flow (via reservoir) into the Balkhash Lake, which is shrinking and releasing land covered with salt. The salt is spread by the wind and causes salination of the surrounding territory and formation of broad areas of brackish soil that cannot be exploited.

The organization and regulation in water management

Currently, the Committee on Water Resources (CWR) under the Ministry of Agriculture and Water, is the highest entity for managing the water resources in the country, evaluates the requests and determines the limits for water use for each *oblast* for each water sub-sector (municipal supply, irrigation, fisheries, etc.) based on available water sources.⁴ The volumes are then communicated to the BVU (which issues the official limits) and to the relevant RGP (Republican Enterprise Entity) — formerly *oblast* water department—which then specifies the respective limits for consumption within the *raions*. Each *raion* entity receives the allocation approved by the RGP chief, with irrigation volumes based on the hectares of irrigated lands. The *raion* entity then provides water users with the water limits and their monthly distribution. In this context, the BVUs perform a coordinating role and up to an extent executive administrative function in regard to water allocation.

This process is still complicated, requiring a lot of forms by the entities and water users. The government plans to streamline the process, by strengthening the BVUs and by merging the *raion* entities into the structure of the RGPs. This would seem as a positive step towards more integrated water management within the basins.

The regulation of water use is based upon a permitting system. The CWR has the authority to issue surface water permits for large volumes (over 1 billion m³/year). Other volumes are issued by the BVUs, who are the only entities with authority to issue licenses to primary users (those taking water directly from major canals like the Dostyk). Therefore, the *raion* entities are primary water users and most RCCs and associations are secondary users. The newly passed law for water users allows for the RCCWU to obtain permits. Industry and fisheries also receive permits from the BVUs.

Because of the ongoing transition from central planning, the Republic of Kazakhstan has yet to develop a comprehensive planning mechanism for water supply to all subsectors. A concentrated

⁴ For example, for the southern oblasts it is a volume resulting form planning meetings of the ICWC.

⁵ Actually, secondary users exist only in irrigated agriculture

effort to align water and land-use planning on the basis of the river basins and the existing BVUs could achieve more integrated water management. A longer term plan (10 and 20 years), identifying realistically projected needs for each sub-sector using water would help establish a higher degree of certainty for water users. The planning for immediate needs focusing on two to five years is a good step forward to account for limits and priorities for allocation of water resources.

Formation of Water User Associations (WUAs)

The Water Users Associations in Kazakhstan had an interesting development history with some failures and some successes. The first WUAs set up in 1994-5 failed, mainly because there was no prior knowledge or government support. Later, under new legislation former large cooperative farms were transformed into Rural Consumers Cooperatives, which could also form associations. Other forms of farm types were also possible. However, the first true water users' organizations were formed under two externally funded projects (ADB and WB) for rehabilitation of irrigation and drainage infrastructure with an institutional component. Both projects are still ongoing and mark good progress with water users and establishment of associations, as well as federations in the South Kazakhstan *Oblast* in Makhtaral *raion* on the ADB irrigation and drainage rehabilitation project and in several locales under the WB project.⁶

The ADB rehabilitates irrigation and drainage infrastructure on 39,250 ha for \$55.12 million, with \$40 million from ADB and the remainder from the government. The project is to finish in 2005. The WB project is in pilot areas of nine oblasts, at a cost of \$100 million, with IBRD providing \$80 million and the GOK \$20 million. In total, 6674 water users irrigate within these two territories, 6658 of which are independent farmers; others are limited partnerships, consumers' cooperatives and *kolkhozes*.

The Ministry or Agriculture reports that there are 31 RCCWUs with 6,658 members covering 60,353 ha, of which 2,196 are independent water users organized into 11 RCCWUs irrigating 23,136 ha. Twenty RCCWUs have united into four associations/federations covering 37,217 ha of irrigated farm lands, with 4,462 members. The RCCWUs and their federations exist according to the law of non-commercial juridical entities; they need to re-register according to the recent law on RCCWU of April 2003 within six months. Their role is to provide services to their members: supply them with water and maintain the canal network and associated infrastructure, thus functioning like the WUAs.

Water distribution policies and pricing

Before 1992 water used in irrigation was provided free of charge. The first pricing of water came about in 1994 (after the first Water Code was introduced in 1993) with the economic reforms toward market economy. The Code stated that the water charge would depend on water quality and type of water use. The *raion* water management entities (UVSs) then were allowed to charge water users a fee, based on their real costs (different UVSs charged a different price), with the

⁶ The World Bank is funding jointly with DFID another, though not per se agricultural, water resources project Nura-Ishim river Basin Management Project KZPE59803, which purpose is to improve management of water resources throughout Kazakhstan with initial focus on the Nura and Ishim Basins. The goal is sustainable access to safe, reliable, and affordable water supply with service delivery available on a universal basis by 2010.

price being approved by an *oblast* plan management bureau. This situation existed until the establishment of an anti-monopoly committee in 1996, which controls prices in all natural monopolies.

Water users have to pay tax—an abstraction charge—for water as a resource (see Table 2 below), in accordance with GOK Resolution No. 1227, dated August 7, 1997. The resolution specifies the charge for different subsectors for each BVU. Upon confirmation of water volume used, which is provided by the BVU, the water user pays the required amount of money directly to a specified local bank at the end of the year. The water user may constitute a UVS, RCC, an association, enterprise, or an individual person—in any case someone who has a license to use water.

Table 2: Rates for payment for the use of surface water resources

		Consumptive water use rates (tyin/ m3)				Non-consumptive water users		
#	River basins	Household utility companies	Industry and power plants	Agriculture*	Fishing from ponds	Fishing from rivers (tenge/ t)	Hydro power (tyin/ kwh)	Water transport (tyin/ T- km)
1	Aral-Syrdarinski	3.88	10.93	3.02	3.02	77.24	1.15	0.43
2	Balhash-Alakolsky	3.45	9.49	2.73	2.59	67.74	1.01	0.29
3	Irtyshsky	3.74	10.79	3.02	3.02	76.34	1.15	0.43
4	Ishimsky	3.60	10.07	2.88	2.88	72.35	1.01	0.29
5	Nura-Sarysuisky	4.03	11.51	3.31	3.16	81.69		
6	Tobol-Turgaisky	3.60	10.36	2.88	2.88	73.64		
7	Ural-Kaspiysky	4.31	12.23	3.45	3.31	86.73		0.43
8	Shu-Talassky	4.03	11.36	3.31	3.16	81.55	1.15	

^{*} For agricultural use the rates for the use of surface water resources are reduced as per 1 January 1998. Source: ADB/TA –No. 2946-KAZ: Institutional Development and Policy Reforms for Improving Water Management

The funds collected from the water tax (charge for use of water resources) become part of *oblast* revenues. It is obvious that irrigators are unable to pay all the charges and taxes imposed on them; on the average about 50 percent is being collected for water fees. Although the Water Code specifies certain uses for these monies, it is evident that very little is used to maintain irrigation systems.

Water Resources Planning and Allocations Policies

The planned use of water resources within a river basin context is a common practice in many countries. It is a precondition for determining the need for investment and, if necessary, the transfer of water between river basins. A river basin plan is based upon determination of the available water supply without depleting the river system of its sustainable requirements. The available supply is then distributed among competing users based upon their ability to pay, but also in relative accordance with the country's water resources development objectives. In practice, the priority is normally given to providing safe potable water supplies. Commercial users of all types compete for the remainder. This means that agriculture, unless it is based on high value crops, may have the lowest priority. Whatever the priorities may be, all water uses are based upon the assumption that the more you use the more you pay, both in total and on a per

unit basis. There is therefore every incentive to use water efficiently. In Kazakhstan, river basin plans of this nature have not been developed. On the contrary, water usage continues to be driven by supply parameters, which have changed little over the past 30 years and which largely ignore efficiency criteria.

The Water Code states that "potable and communal water has a priority, and water management is performed on the basis of river basins and administrative territorial units, taking into account optimum water use and protection of water sources and ecology." Nevertheless, the water allocation mechanism consists of preparing a composite of water needs, compiled annually for each sector, first at the *raion* level; then within each *oblast* and basin, with the consent of territorial units of ministries overseeing that sector. Also, at each *raion* and *oblast* the quantities of water are agreed upon by the relevant administrations. The BVU forwards the composite number to the CWR. The CWR decides how much water each *oblast* will receive depending on the water supply situation. If available water supply is lower, then for agricultural needs the RGP and BVU evaluate and decide on shares to water users within the *oblast*. As such, water is allocated under a principle of supply side management, rather than the more efficient (and preferred) demand management model. In other words, no attempt is made to match supply to any price mechanism.

Water users in every sector need to pay fees, which are different in each basin. There are two fees, one for the water delivery and another one is a tariff for water as a resource. The fee for water delivery can be set by each *raion*, because the conditions for water delivery and infrastructure maintenance differ. The antimonopoly committee approves the level of the fee. High tariffs for water supply services to farms in the southern *oblasts* of the country have accumulated 408 million Kazakh *tenge* in arrears, thus causing losses for business entities providing services to agricultural water resource users. The output of irrigation systems constitutes only a half of the potential, mainly due to high degree of wear and tear of irrigation facilities.

Government plans

The government is recognizing that support to water users is needed and plans to adopt measures to improve conditions for irrigated agriculture. Among these is adoption of new versions of the Water Code and the Land Code, both currently being discussed by the parliament. Additional support is in the form of subsidies to rural water users from the Republican budget to cover the gap between non-recoverable cost in the water supply services provided by state-owned water resource operators.

Also, the plan is to rehabilitate the most damaged sections of inter-farm channels and irrigation and drainage facilities and establish a "Kazagromeliovodkhoz" methodological centre as a state-owned entity with the mandate to monitor the status of irrigation systems and design and construct sections of irrigation systems.

⁷ There are eight basins in Kazakhstan and most of them are transboundary, engaging in distribution of water through bilateral agreements.

The government is painfully aware of the fact that the new generation of farmers needs different conditions for obtaining and improving their know-how in irrigated agriculture and development of agribusiness. Training of 20-25 hydrotechnicians and waterworks construction engineers annually has been incorporated into the 2003-2005 plans a state training program.

As a result of the 2003-2005 plan, among other things, the government expects that the profitability of crops would increase, and irrigation system efficiency would increase up to 80 percent. It is also expected that 150 new jobs in land improvement and agricultural water use entities would be created. The planned rehabilitation of the most damaged sections of inter-farm channels and irrigation and drainage facilities and establishment of the "Kazagromeliovodkhoz" state-owned entity would aid in the situation.

Measures to improve the agricultural production at the farm level will be in form of subsidies to the costs of the water fee and loan repayment by the agricultural producers: 40 percent in 2003, and 30 percent in 2004-5. The amounts can be adjusted according to the results of the draft Republican budget for the corresponding fiscal year by the Republican Budgetary Commission. The loans of the International Bank of Reconstruction and Development "Improving Irrigation and Drainage Systems" and Asian Development Bank "Water Resource Management and Land Rehabilitation" stipulate percentages to be recovered form the water users. The government will also allow the water users a grace period of seven years after the rehabilitation is finished.

The existing problems in irrigated agriculture are quite tangible. The long-term tenure introduced in Jan 2003 negatively affects the situation of development of small and medium agricultural producers. This is expected to change with the new Land Code, allowing private ownership of agricultural land. This should also positively reflect on the land and water productivity and increase efficiency of the irrigation systems. Also, the newly passed law for RCC water users should stimulate formation of WUAs. Naturally, passing the law is not going to establish many associations suddenly and more work on propagation of the concept needs to be done.

B2. Examination of Donor Programs

B2a. Government of Kazakhstan projects

Ministry of Agriculture

Deputy Minister Lilia Musina

Key points:

- MOA working toward developing access to credit for all types of Kazakh agricultural producers. Kazakhstan has three basic agricultural economic tiers:
 - Large Farms: commercial banks lend to these farms at reasonable rates as they
 have a strong productivity track record, sufficient collateral, and good repayment
 history.
 - Middle Producers: Most difficult client base to serve. Have land but not yet able to mortgage it; have some agricultural technical skills and some historical production but limited personnel depth, limited collateral, old Soviet era machinery and willingness to work hard.
 - Leasing may serve their needs
 - Agricultural cooperative marketing and supply businesses may also help
 - Strong candidates for credit partnership
 - Poor Farmers: most poor farmers are former farm workers trying to work their land for subsistence plus some produce for small market income sales.
 Microcredit is their best financing approach.
- Commercial bank financing is the appropriate long term solution but need interim financing capabilities until production agriculture is more bankable.
- Kazakh government has developed two government-sponsored corporations to provide financial services to the middle and lower level agricultural producers.
 - Commercial banks are not financing these tiers due to their limited creditworthiness and low profit margins.
 - Bank loan officers do not understand the farmers' credit needs, funding time windows, and revenue streams.
 - Agricultural production still in transition and agricultural entrepreneurs need assistance to become fully operational businesses.
 - o Long term government interest is for agriculture to be commercially financed

- Privatization of these government-sponsored corporations planned after they become fully sustainable.
- Warehouse receipts have been an important aspect of government credit initiatives:
 - Now operational though at a low base with about one-third of grain production being used for warehouse receipts.
 - o Banks using as collateral without other documents or collateral.
 - o Approximately \$3 million loaned against receipts and growing.
 - Government wants to establish a government-sponsored indemnity fund but needs more technical assistance on its development.
 - Government was inappropriately encouraged that warehouse receipts could be used to develop a bond instrument.⁸
- The mandate for economic growth in agro-processing has been given to the MoA but the government is only in the early stages of planning.
 - o Support market-oriented agro-processing.
 - Two budgetary programs to support agro-processing:
 - Preferential credit from government resources
 - Banks undertaking credit risk
 - Government subsidizes 80% of interest costs
 - Leasing of agro-processing equipment and machinery
 - Government funds the equipment purchase
 - Bank assumes credit risk of borrower
 - Subsidized credit to lessee
 - o Developing agro-processing training program.
- Agricultural Risk Management Products:
 - o Government wants to develop crop insurance and other risk management tools
 - o Draft law in development

⁸ It is not clear from where the government gained a notion that warehouse receipts could be developed into a bond unless a large grain warehouse wished to use warehouse receipts to collateralize asset backed securities (ABS). This would only be useful where warehouse receipts were considered as liquid as cash and ABS were able to gain financing costs cheaper than a bank loan collateralized by the same receipts. Warehouse receipts as well as the Kazakh capital markets are too early in the development to warrant significant financial savings at this juncture.

- o Need participation of crop insurance but do not have program developed.
- o Need comprehensive analysis to understand commercial crop insurance program.

Credit Corporation of Kazakhstan

Established as a government sponsored federated network for intermediating funding through privately owned retain credit associations to agricultural producers. Organizational structure and basic loan products are as follows:

- Government wholly owned corporation supervised by the government:
 - o Minister of Agriculture is a member of the board.
 - Other government officials serve as board members.
 - Two years of experience loaning money to credit partnerships established for retailing credit to agricultural producers.
 - o Credit partnerships registered by the Central Bank—NBK.
 - Owners are farmer-members.

CCK borrows money from the Kazakh government budget for lending to local retail credit associations that make loans to agricultural producers.

The CCK and the rural credit partnerships having been in the organizational and beginning operational stage for three years and now have more than two years of lending experience. To date, the loan repayment experience is quite high, approaching loan default rates of microfinance institutions. This is not surprising as many of the medium and small agricultural producers have few financing alternatives. The Ministry now supports a draft Law on Microfinance and Credit Partnerships that will grant permanent status to these institutions as nonbank financial institutions regulated and supervised by the NBK to finance the agricultural sector.

Agro Finance Corporation of Kazakhstan

The Kazakh government has also sponsored the establishment of Agro Finance Corporation to operate a leasing operation for agricultural equipment and machinery to producers. The primary features of the AFK program are as follows:

 The leasing company has been operational for one year with an initial leasing authority of \$80 million for which \$45 million have been placed for three-year leases with 350 farmer lessees.

⁹ Credit Partnerships are sometimes translated as credit unions but this is a misnomer, as that term is generally understood. A credit partnership is a joint stock company operating as a retail credit association that is partially capitalized by the government and partially by private investors.

- Have a technical licensing team traveling throughout Kazakh regions.
- Have more than 2,000 farmer applications to assess their credit and develop leases.
- Trying to emphasize lower cost Belarus, Russian and Ukrainian equipment and machinery—tractors, harvesters, sprayers and farm implements.

Both agricultural finance companies struggling with government directives to:

- Be commercially operated and profitable.
- Grow the business rapidly to provide access to credit and leasing to every qualified agricultural producer.
- Provide lower cost financing than commercial banks would charge.

AFK management believes all of these goals are impossible to meet and need technical assistance on how to manage these goals and still build a profitable finance company.

Client farmers have similar problems that the CCK and AFK cannot solve:

- Most medium and small farmers have strong technical assistance needs for training, management planning, farm management, accounting, and general business practices.
- Farms need stronger managers.
- Subsidizing credit is not going to improve this situation but likely to make it worse. Subsidizing credit stunts the growth of the finance companies:
 - Need higher skill management and need to pay higher salaries in increasingly competitive Kazakh market
 - Need higher margins to build capital to support more leasing growth as cannot subsidize, build and repayment the budgetary funds to the government.

B2b. USAID/CAR projects

USAID/CAR

George Deiken, Mission Director for Central Asia
Wayne McDonald, Program Officer, Task Order CTO
Michael T. Fritz, Deputy Director for Central Asia
Michael T. Harvey, Tajikistan Country Representative
Kimberly Rosen, Deputy Director, Office of Enterprise and Finance
Ken McNamara, Project Management Advisor, Office of Energy and Water

Key points:

- The Mission is not necessarily looking for a new agricultural program. They are very interested in finding ways to create synergies with existing projects and leveraging existing resources more effectively.
- The Mission clearly wants to develop a better understanding of the sector in terms of constraints and opportunities for a second level of work under existing projects.
- Looking to get more mileage from agricultural policy and demonstrations requires better understanding of policy dimensions of agriculture, water, trade, and SME work.
- Uzbekistan may have an emerging opportunity with the new presidential decree that will push privatization, allow crop diversification and non traditional exports, and allow adjustments to the state order program in pilot areas.
- The IFC International Agricultural Program in Khujand may be a good model for Uzbekistan. The IFC works with Case;
- Can WUAs receiving a lot of TA form a nodule for a cooperative structure even though they are nascent? How far can they be pushed? They seem to be the only structure in Uzbekistan and Tajikistan. Because they are community structure, could they be a focal point for group lending or leasing? IFC has leasing companies in Uzbekistan; recognize need to look long-term to build advocacy capacity and to develop their ability to access credit; it appears that the GOU wants to dump cost of water on farmers; the GOU recognizes the need to recover the costs of water;
- The Mission would like to push Uzbek and Tajik governments in further reform with agricultural pilot projects and water programs; most governments in CAR do not have policy formation capabilities
- Possible issue of Tajik genetic program for wheat seed multiplication;

• The World Bank has a \$45 million agricultural project in Uzbekistan; how could AID be helpful.

MASHAV (Center for International Cooperation)

Dr. Emanuel Libin, Program Manager

In 1999, consulting centers were opened in Kazakhstan, Kyrgyzstan, and Uzbekistan. The Almaty Center is also the central office, and is oriented on cooperation with researchers on developing the innovative projects. These centers assist in solving such problems as poverty through professional-technical training of the specialists, and know-how transfer. The MASHAV program includes: training programs in Israel; education programs in each country according to the local demands; short-term consultant programs; long-term consultant services to promote the financial support of elaborated projects; and joint research programs with Israeli scientists.

MASHAV educational programs include a wide range of courses: education and public development, agriculture and researches in the field of agriculture, development of the rural and urban regions, economic and social development, cooperation, labor organization, environment control, environment protection, healthcare and medical programs, and the role of women in society. The educational programs contain the conceptual approach and represent the wide spectrum of the advanced views. For example, the Russian version of the computer program EASY-PLAN is widely used in consultative work. The business plans of some projects implemented with the help of this program are one of the important documents for receiving grants, loans in international programs.

Key points:

- There are currently five consulting centers in Kazakhstan, two in Kyrgyzstan, and one in Uzbekistan.
- The agricultural development situation is different in each country of CAR and be understood before any assistance is proposed.
- The first and most important task of any project is to help individuals change their thinking to a market-oriented perspective. This will take considerable time and effort.
- MASHAV prepares individuals to work with new and more appropriate technologies, new economic ways of conducting business. They have implemented over 500 pilot projects on land, cotton, livestock, milk, fruit, and vegetables.
- MASHAV identifies farmers and evaluates potential projects, provides continuing advisory support and training, and facilitates access to credit.

- MASHAV implements demonstration projects near each center and utilizes local advisors
 for training at the demonstration sites. Credit is a major constraint to the development of
 projects. Credit programs are too expensive for most farmers and there aren't any
 government guarantee mechanisms to help lower these rates. The credit unions
 developing in Kyrgyzstan may demonstrate to be a good sources of small credits.
- Corruption is also a major issue in all countries, where it is impossible for farmers to access credit unless they pay off the decision-makers. This issue is being considered at all levels, but a resolution will be slow in development. Hopefully the government will support a resolution to this problem.
- The development of effective associations will help to resolve many problems faced by farmers. MASHAV collaborates with IFDC on Osh to unite fruit and vegetable producers/processors into an association, as an example of how this should be done. Producers united around technology (i.e., drip irrigation and greenhouses) seem to be able to resolve problems. These model sites serve as good examples to other farmers and work best when they are at a distance from the government.
- The model enterprises need desperately working capital and MASHAV has been working with Winrock on the development of a model social fund where members can receive inkind credits.
- MASHAV recommends the provision of appropriate technology to farmers in order for them to attract working capital and donor support.
- An interesting pilot project is an example of working across borders. Milk producers in Kyrgyzstan are collaborating with a milk processor across the border in Kazakhstan. MASHAV provides small-holder milk equipment that helps protect milk quality. The Kyrgyz milk is cheaper and this attracts the processors and creates opportunities for the farmers.
- MASHAV also works with entrepreneurs with considerable resources on the
 development of large integrated projects. These entrepreneurs generally do not have
 problems in accessing finance and have the knowledge required to implement and
 manage large projects. MSAHAV has supported over 20 such projects in such areas as
 greenhouses, dairy processing, soft drinks, camel production and milking, fruit and
 vegetable canning, and marketing.
- MASHAV projects are practical, based on economic analysis, built around entrepreneurs, and demonstrate real achievements.
- Uzbekistan is a special case in that there are no commercial banks to work with and the government is a big part of the problem. It is a very bureaucratic country that is going to take a long time to change the mind-set even if there are policy reforms. Businesses are still required to obtain inputs and export through government agencies.

ACDI/VOCA

Oleg N. Urazov, Managing Director Farmer-to-Farmer Program

Key points:

- ACDI/VOCA works with farmers and farmer associations, micro-finance organizations, commercial banks, and bank training centers in Almaty and Bishkek.
- ACDI/VOCA has also been involved with the warehouse receipts program in Kazakhstan with a sub-grant with Pragma. This activity, implemented through 2002, provided seminars and training for grain warehouse managers and grain traders. It was implemented in conjunction with the EBRD, which provided the \$50 million in funding, contingent on the Kazakh grain union members establishing an indemnity fund. There was disagreement between the Union and Government on how to regulate the indemnity fund. ACDI provided seven consultants from the US and Bulgaria.
- There are about 230 public grain elevators in Kazakhstan and 13 of the largest are part of the grain union.
- There is an opportunity for ACDI to provide more training in warehouse management and the Ministry would support this activity.
- ACDI is working with the Central Asian Micro-Finance Alliance (CAMFA), the Osh agribusiness initiative (OAI), and the Community Action Investment program (CAIP)

Kazakhstan Small Business Program (KSBP) European Bank for Reconstruction and Development and USAID Bertolt Hertzfeldt, Program Coordinator

IPC, a German management consulting firm, provides technical assistance to an EBRD onlending credit line to Kazakh commercial bank for micro and SME lending. IPC presents a textbook formula for extending microloans efficiently and profitably, leading to early sustainability of microfinance operations. By placing the microloans through commercial banks, as opposed to NGOs, the IPC developed microloan customers have the ability to graduate to larger and more varied loan products, provided the underlying businesses support servicing these larger products. Primary elements of the lending and the technical assistance are as follows:

• Loans range from \$100 to \$10,000 for micro loans up to 2 years at 19 percent to 25 percent and from \$10,000 to \$200,000 for up to 7 to 10 year SME loans at 19 percent to 25 percent.

- Express microloans are provided up to \$2,000 for up to a year (rates of 25 percent to 35 percent per annum) based on a technical scoring model with two-day approval and securing 100 percent by movable assets.
- Loans are available in Kazakh *tenge* or US dollars. Exchange risk has been low due to the relatively low Kazakh inflation of 5 percent for 2002.
- Less than one percent of the EBRD program wide loans are in default. Default is defined as one day overdue.
- The IPC program hires trainees for developing into micro/SME loan officers. Selected trainees must have university education, communications skills, computer skills, less than 30 years of age. Also:
 - o During first six months, trainees are student trainees
 - Go through comprehensive classroom loan training program—loan application process, accounting, credit analysis, borrower interviews, business assessment and due diligence; loan collection and workout
 - o Begin making micro loans under close supervision in participating EBRD banks
 - o Graduate to micro loan officer under general supervision
 - o Move up to SME lending with close supervision
 - o Graduate to becoming full time bank loan officer.
- IPC trained more than 1,000 loan officers over five years
- IPC also provides management information systems to banks to improve bank management understanding, monitoring, and loan decision-making.
- EBRD working with seven Kazakh banks with more than 125 lending branches and outlets throughout Kazakhstan.
- IPC staff consists of 40 banking consultants, lawyers, and information technology professionals.
- The EBRD micro/SME loan portfolio breaks down as follows:
 - o Trade—retailing shops, kiosk, bazaar stalls or street sales—60 percent
 - o Production—20 percent

- Services—agro-processing, small entrepreneurs, food services, hair salons, internet cafes, business and computer centers, etc.
- IPC is looking more closely at agricultural production and looking to expand in this market that they know well and in niche agricultural production where they understand the underlying economics and cash flows, such as dairy.
- Kazakh banks cost of funds for the program equals LIBOR plus EBRD apex bank rate for about 12 to 15 percent.

IPC believes that the success of the Kazakh Micro/SME programs is based upon:

- Strong Kazakh Central Bank supervising commercial banks to concentrate on fundamental banking practices for running sound bank operations.
- Banks operating on BIS international banking standards—with many exceeding the BIS minimums.
- Strong Kazakh business growth despite global slowdown—12 percent in 2000, 10 percent in 2001, and 7 percent in 2002.
- IPC is interested in expanded loans in the agricultural sector and has been working with PRAGMA to learn more of the agribusiness revenue models and to get broader dissemination of the EBRD micro/SME loan program.
- IPC would like to have more segmented analysis of various agricultural sector businesses.
- Kazakh commercial banks would benefit from specialized loan officer training on agribusiness revenues, cash flows, loan pricing, lending techniques, collateral, and collection issues.
- Kazakh agribusiness would equally benefit from borrower training, particularly more rural production and post harvest processing business—on how banks operate and the basis for their lending requirements.

USDA/FAS

Alexander I. Simon, Agricultural Specialist

Key points:

 Kazakhstan is committed, at least on paper, to the modernization of the agricultural sector. The current government plans to allocate \$300 million to various development efforts.

- Kazakhstan ranks sixth in the world in cereal grain production and exports about 5 million tons a year. Today, most exports are to North Africa and the Middle East. Investments are being made for improved grain storage terminals on the Caspian Sea and improved rail lines to move the grain westward (traditional North to Russia). Kazakhstan does have a direct rail line to China.
- Exports include: 1st wheat (4.0 million tons), barley to Saudi Arabia. Soybean (25,000 tons) is a growing sector for animal feed.
- Food imports are 1st sugar, 2nd vegetable oil, 3rd meat, 4th dairy products, and 5th fish products.
- Total value of food imports in 2001 was estimated to be about \$350 million per year and growing.
- Sugar beet, corn, and soybean production are on the rise
- Exports are grain, meat, black caviar, spirits, beer, livestock
- Food retailing is a growth area as wholesalers look to expand their activities.
- Sanitary and phyto-sanitary issues are a growing concern by the government. There is a fairly good veterinary service throughout the country with labs that are not very modern.
- Demand for meat processing technology (many small processors) and increasing sheep production.

The Pragma Corporation
Enterprise Development Project (EDP)

John Bengel, Country Representative

Asley Moretz, Director Business Advisory Services

Trade and Investment Project (TIP)
Paul Pieper, Chief of Party

Financial Sector Initiative (FSI) David Lucterhand, Chief of Party

1. PRAGMA—Financial Sector Initiative

The PRAGMA Financial Sector Initiative has successfully introduced a number of financial instruments into the nascent Kazakhstan financial markets that are gradually building in depth and breadth. Important to the agricultural sector has been the development and introduction of warehouse receipts as both a financial instrument adding new security for commercial bank loans to grain producers and as a document of title facilitating transfer of grain from party to party

until the ultimate end user receives delivery of the grain from the public warehouse or elevator. PRAGMA and its subcontractor ACDI/VOCA worked with the government in revising Kazakh laws and regulations to permit a commercially viable warehouse receipt.

The project trained bankers, grain producers, warehousemen, government grain inspectors, grain union members, and other government and commercial people thoroughly in various aspects of the new warehouse receipt program. Bulgarian grain warehouse experts, operating under a similarly transform warehouse receipts program, traveled to Kazakhstan to review the Kazakh public warehouses and the grain inspection program as well as to advise government and public warehouse officials on improvements to implement effective use of warehouse receipts. A new two part receipt, comprised of a grain storage certificate and a pledge certificate, typical of Eastern Europe was developed and officially replaced the former Soviet form PK-13. An EBRD on-lending program was established through commercial banks that used the funds to make loans secured by warehouse receipts.

The EBRD program was conditioned on an indemnity or guarantee fund being established to guarantee the grain deposits in the event of bankruptcy or malfeasance of a public warehouse. The warehouses and grain industry typically establish indemnity funds while guarantee funds are normally government initiatives. The Grain Union developed an indemnity fund but it has not yet become fully operational, as the participants did not contribute actual cash to the fund. Because the indemnity fund has not become fully operational, the Government of Kazakhstan is looking to establish a government controlled guarantee fund to assure the operational certainty of warehouse receipts. The government fund has not yet been established. Ministry of Agriculture officials overseeing the warehouse receipts program have requested further information on indemnity and guarantee funds.

In the meantime, warehouse receipts are being taken as collateral by financial institutions in the absence of an indemnity or guarantee fund. PRAGMA estimates that fully one-third of Kazakh grain harvests are placed under warehouse receipts. Banks are taking warehouse receipts for short term loan collateral and as part of a larger collateral base for larger loans. Banks would not disclose their proprietary information on interest rates, loan to value coverage, or other collateral issues, but they generally acknowledge accepting these receipts as collateral. Thus, warehouse receipts are being accepted by the industry and commercial banks as the intended financial instrument.

Usage of warehouse receipts is not without issues and problems. Tax authorities in some oblasts are attempting to tax loans secured by warehouse receipts as a taxable event. There is also some misunderstanding among some regarding the intended circulation of warehouse receipts. Legislative proposals have arisen to amend the Law on Grain to facilitate greater "circulation" of warehouse receipts. ACDI/VOCA has recommended more comprehensive training throughout the public warehousing system to ensure that most warehouse operators and decision makers are fully aware of the purpose, use, and formalities of every aspect of warehouse receipts.

New financial instruments take time for all interested parties in the marketplace to gain full value of their financial and operational use. Local conditions, industry commercial practice, commercial usage, market and trade developments, and evolving government policy all have a

role in developing local custom and practice in the commercial use of such receipts. As warehouse receipts being commercially used for a substantial portion of the Kazakh grain trade, it would appear sensible to allow that commercial use to continue developing precedent before making any major changes to the regime. All participants in using the receipts know the primary purpose for the receipts. Additional training would not now significantly advance their use at this time of early development. Further fine tuning of the legislation or regulations may be premature before much experience in warehouse receipt use has occurred.

More information on indemnity and guarantee funds can be provided to the government, but the government is aware of the issues regarding such funds. Someone or some group must put forth the funds to support either an indemnity or guarantee fund. This will happen when the grain industry needs the additional loan funds that the EBRD is willing to provide, as they cannot tap those funds now until an indemnity or guarantee fund is fully functional, i.e., that it has real cash reserves backing up the indemnity or guarantee claim. Alternatively, it will occur when the government fully funds its guarantee fund, an action that many government insiders would prefer as it gives them control over the fund. A systemic risk to the certainty and confidence in public warehouses is the failure of one or more warehouses that cannot honor their warehouse receipts for delivery of grain entrusted to their custody. This risk is minimized through an indemnity or guarantee fund. The basic prudential principles and appropriate actions are already known to the government and the grain industry. The decision to make one of these funds operational is in their hands and hopefully will be made prior to the first warehouse bankruptcy or other event causing a default on grain delivery pursuant to a receipt.

PRAGMA—Enterprise Development Project

EDP works with Central Asian businesses on accounting, quality control and other business advisory services. EDP works only with private businesses and generally through associations to reach greater numbers of businesses. Major points gleaned from discussions with EDP personnel include:

- Development of marketing information for SME market segments. In agriculture, comprehensive market pricing information has been developed for a large number of agricultural products.
- Businesses have very little market pricing information to judge product development, volume, and retailing. For agriculture, information slow to devolve to farmers to alter production decisions.
- Lack of financing is a major constraint to success of EDP as businesses do not have resources to act upon EDP information and advice.
 - o Financing constrained by inability to buy, sell and mortgage land.
 - Lack of understanding by potential borrowers of how banks work, what their applications requirements are, and why banks operate the way they do.

- Banks are not fully aware of the revenue and cash flows of small business and when they need financing and for what.
- For agriculture, contract production developing as a key method of financing whereby inputs suppliers or end users supply seed, fertilizers, and CPCs in exchange for payment with a portion of the harvest.
- This inefficient financing system provides poor terms of trade for farmers as the inputs are valued high and the commodities low with the payment price calculated from the low price at harvest. Efficient quality producers subsidize the poor producers and nonpayers.

PRAGMA—Trade Investment Project

The PRAGMA TIP is focused on removing trade and investment constraints, reduce licensing, government inspections and unnecessary regulatory and administrative actions, and restraints on buying, selling, and use of property, both real and personal. The project includes technical assistance on customs reforms and on work leading up to Accession to the WTO.

- Working with private companies, TIP tries to remove obstacles on real business situations. In the agricultural area, this would include certification of seeds, facilitating trade of agricultural products through the transit corridors of Central Asia, reduction of licensing and inspections except as they relate to genuine health and safety concerns.
- Worked with government and IFC on developing a Law on Leasing with appropriate definitional elements, depreciation schedules, and tax treatment of lessors and lessees.
- Technical regulations often do not reflect the system of standards and both need reform. GOST Standard needs major revisions to reflect international standards and the Ministry of Agriculture must be aligned with the reformed standards.
- Trade agreements have been honored in the exception.

USAID/Land Resource Management Team

Gregory Myers, Land and Natural Resource Management Specialist

Key points:

- There is a need to dovetail the agricultural assessment work with the land reform work being conducted by Greg Myers. It is also important to develop a better understanding of how the land issues link with water issues.
- There is a problem in every country with the quality of economic data because it cannot be trusted. In Tajikistan it seems as if they make up the data.

- Kyrgyzstan: more reform minded due to dependence on donor support; the government is frustrated with the lack of significant progress in the agricultural sector; there are institutional and policy problems; the land fund seems to be poorly managed; USAID is pushing the reform agenda forward, especially on land related issues; the main issues are water, cotton, border problems for trade.
- Uzbekistan: Is dependent on water imports that leads to border conflicts; water infrastructure is in poor condition, and there the ADB and World Bank are working on these issues; Cotton quotas contribute to almost slave labor, with the government controlling inputs and marketing; there are three categories of land including collectives, *shirkats* (tied to the collectives), and household plots; the land system is similar to China.
- Tajikistan: This mountainous country is an agricultural economy where the little available land is in cotton and wheat; women work the fields; the collectives control most of the land and small producers are forced into cotton production; small *dekhan* farms are usually created by the collective farm director and are considered "private"; everyone produces some wheat for food security; *raion* administrators still impose an unofficial cotton quota; there is a new decree that could be very bad for small-holders because it states that farm debt will be carried from the collective to the *dekhan* farms; there has also been "presidential land" small private plots.
- Tajik and Uzbek governments want and need help; they are willing to allow "pilot" projects to work free of certain policies (cotton quotas); the main problem is that you are starting with "virtual" land that is to say that it is no cadastre, registration, or even descriptions of the land.

B2c. World Bank projects

The World Bank

Maurizio Guadagni, Senior Rural Development Specialist

The MoA is implementing the Post Privatization Assistance to Agriculture project, agreed June 1998, which focuses on the declining productivity in the farm sector. \$15 million was allocated to the first phase of which \$12.3 million was for the credit component, the remainder for TA. Of this \$12 million \$7 million has already been disbursed through commercial banks and primarily to individual farmers (with almost 100 percent repayment rates). \$25 million has been allocated for the second phase. Since farmers lack liquid collateral, the WB wishes to introduce machinery leasing via private companies (which are in effect, machinery tractor stations or depots). It is believed that the provision of services in this manner (e.g. a tractor together with a driver) will help make the system more sustainable.

Irrigation and Drainage Improvement: The aim of the project to improve irrigation and water control along the Syr Darya river. Some plots have already been renovated and farmers are expected to pay 70 percent of the costs to be recovered. While water is available, farmers often lack working capital and inputs (such as seeds and fuel), although these can be obtained if

farmers use their land use rights as collateral and accept the terms of the cotton corporation. (see, for example, the leasing program where some assistance is being given to farmers). The real problem as far as working capital and inputs are concerned is that demand outstrips supply. In the event that farmers do not pay for irrigation, they will be deemed bankrupt in the courts and appropriate bankruptcy legislation is now in place to make this effective. (Discussions are currently ongoing to extend the project.) the aim of which is to improve irrigation and water control along the Syr Darya river.

Water Resources: the project focuses on the northern part of the Aral Sea, because of the lack of water reaching it from the Amu-Darya and Syr-Darya rivers.

Future projects:

The Agricultural Support Services Project has been approved by the Government (USD 650,000) and is currently under preparation. It is due to commence in the fiscal year 2003 and will include the following components: veterinary; phytosanitary; seeds; market information system, together with a Competitive Grants Scheme within the MoA.

A forestry project (\$30 million) under the Ministry of the Environment, is under consideration, and plans to start with forestry enterprises in eastern Kazakhstan (the oblasts of Pavlodar and Semipalatinsk), focusing on risk management strategies (to combat pests, diseases, fire) and reforestation.

EBRD

The EBRD has provided an SME credit line (to support private sector businesses to finance working capital and fixed assets), which is available to the agribusiness sector, and loans in this area so far approved have included, a cereal manufacturing plant, an egg production plant, a vertically integrated factory and two flour mills. In late 2001, the EBRD introduced a Grain Receipt project (\$27.5 million) where funds may be drawn down once grain has been stored in a 'secure' storage facility (effectively, using warehouse receipts as collateral).

Small Enterprise Assistance Fund—EBRD/USAID

SEAF was created as a joint EBRD/USAID venture to provide venture capital to small businesses in Central Asia. The highest percentage of investments to date is to Kazakh SMEs where the business and investment climate is the most favorable and vibrant. In Kazakhstan, SEAF has focused on distribution, financial services, light industry and light services

- Distribution: pharmaceuticals, and cold storage;
- Financial: banking and leasing (large and small equipment; for agriculture—harvesters, tractors, and small cultivators)
- Light industry

• Light services: printing, packaging, copying centers, hotel and tourism industry (especially eco-tourism)

SEAF has worked well with PRAGMA EDP and TIP. Exhibitions have been helpful in educating entrepreneurs the type and quality of services that are needed—eco tourism exhibition and cross border trade.

SEAF would like more in-depth and detailed marketing support and analysis from EDP.

- Need to have marketing studies more focused on individual products with precise product size, color, appearance and style demands.
- Need price point information based on product size and volume;
- Especially need this information for food processing as the processors do not understand what the market values for the different product variations.

All types of food industry businesses need this information from production to retailing. Even sophisticated international standard food retailers, such as Ramstore and Agadir, do not have very good understanding on product and pricing information. A quick survey of competing supermarkets will reveal many wide margin pricing differences on a wide range of products.

For many projects reviewed by SEAF, the lack of working capital is a major deficiency.

- Upper level bank management do not understand business working capital needs and how the revenue streams of businesses can be channeled through banks to minimize working capital loan risk;
- Misunderstanding of bank managers and officers of industry segments and the need to assess businesses based on an industry analysis and leading firm assessment.
- Kazakh banks could benefit from western bank twinning relationships, specialized bank officer training for SMEs, particularly food processors, and development of bank institutional training programs. Kazakh banks should develop a bank wide loan officer training program similar to the EBRD SME program but for all types of business lending.

B2d. Asian Development Bank projects

ADB has stepped up its support for private sector activities in Kazakhstan. A private sector assessment was undertaken in 2001. The approved Farm Restructuring project will support the development of private farms and agribusinesses, and a loan project is being processed to promote urban small business through financial and technical assistance. The public sector loans and TAs for 2002-2004 will aim to create enabling conditions and generate business opportunities to develop the private sector through policy and institutional reforms and physical

investments. A rural income generation will help develop rural finance institutions to provide financial services for farmers and rural private enterprises. A road rehabilitation and maintenance project for 2004 will support the development of domestic private road construction and maintenance enterprises.

The loan program for 2002-2004 was agreed upon by the government. The program aims to reduce poverty and focuses on: agriculture and rural development, transport, education, early childhood and women's development, and water supply and sanitation, which are selected based on the following: (i) ADB support is critical to combat poverty, as most of the poor live in rural areas with unsafe water supply, and children and women are among the most vulnerable groups. (ii) The areas are priorities in the government's development strategy. (iii) Other donors are active in other sectors. (iv) ADB has gained valuable experience in the agriculture, transport, and education sectors, and the government agencies concerned have made progress in becoming familiar with ADB's operational policies and procedures and in developing necessary capacities for project implementation.

Ministry of Agriculture

All suggestions for possible ADB assistance in this area in the future should be seen within the context of the statement by the Vice-Minister for Agriculture, which reflects the current GoK view towards all donors, that it is "now our turn to select donors, not for them to select us."

Capacity Building. The MoA has specifically requested assistance from the ADB (grant funded) to help build the necessary capacity to undertake the work associated with the new roles and functions and specifically to continue work on preparation, analysis and implementation of sector policies. The MoA wishes to develop a system for the appropriate preparation of staff (skills, expertise in the relevant fields) and the retraining of qualified specialists, including training abroad.

Rural Development/Rural Diversification Activities. In the light of the Presidential statement that 2003-05 will be devoted to Rural Development, and in connection with ADB support to poverty reduction, assistance to Rural Diversification activities, specifically on non-agricultural activities in rural areas, so as to create employment and generate income would link agriculture, rural development, poverty and water resources (although this simultaneously requires public investment in the rural infrastructure – roads and communications, as well as water and other public utilities). This could also be developed to support diversification of activities within agriculture, using the comparative advantage and sub-sector analyses (e.g. gross margin analyses, crop budgets) currently being prepared with the assistance of EU/TACIS and UN/FAO, so as to enable farmers to engage in the most profitable forms of activity. The MoA pointed out that such a project would probably require a department for Rural Development, which does not exist at present—although the Ministry of Economy has a department that deals with regional activities—but is now considered an important department in many countries in the region. As the Vice-Minister noted, there would be a need to build capacity for such a department since the skills and expertise did not exist in the ministry at the present time. (See above)

Rural Finance. Assistance from ADB was requested by the AFK chairman, specifically drawing on ADB experience elsewhere, to develop a proper training program for the following

CA members: credit officers, accountants, chairmen of these credit associations. While appreciating the need and importance of such training (and the earlier ADB discussion of such assistance), the present review would also advise caution, since involvement in an essentially government organized and budget funded operation, with no independent loan evaluation process, is likely to prove problematic in the event that non-transparent and fraudulent procedures come to light. This is also one of the reasons why the World Bank disassociated itself from the scheme and preferred to concentrate on its own separate scheme through commercial banks (though, by definition, targeting a different stratum of producers/farmers.)

Processing/Distribution and Wholesale market: The MoA considers that at the present time one of the most urgent problems is to organize a system of wholesale purchase of agricultural products (as well as for processing). While the problem of inadequate processing facilities needs to be addressed, and in the MoA this issue is closely linked to the fact that some 50 percent of agricultural products are currently imported, the question of the wholesale distribution of agricultural products has already been addressed by an earlier EU TACIS project that established seven wholesale markets (mainly for fruit & vegetables), the most successful in Ust-Kamenogorsk although one also operates in Astana. In addition, legislation is now in place to ensure that wholesale markets are regulated. Furthermore, the current EU TACIS project aims to establish a vertical market for agricultural products in Kazakhstan. The MoA, however, requested that ADB assistance in 2003-4 be considered, suggesting that TA to use the grant of \$300,000 envisaged for 2003 (for preparation of the second farm restructuring project) in accordance with the MoU.

Water for Irrigated Land: In southern Kazakhstan, especially in Makhtaaral'sk *raion*, there is a serious problem of a shortage of water for irrigated land, as a consequence of the dramatic reduction in water from the Dostyk canal (from Uzbekistan). This links land and water management, the association of which is stressed in the Strategy Plan to 2010. The MoA also asked whether the irrigation and drainage project could be extended to other areas, in addition to the ones currently covered by the projects.

Agency for Land Resource Management

While land use is currently based on a reasonably good quality land cadastre, it is already five years old, the technology for monitoring is even older, and there are insufficient budgetary means to update the technology. Assistance is requested with proper cadastre mapping, and the ADB regional experience is seen to be useful here, especially in Mongolia where the ADB started with a pilot project area. This is deemed of even greater importance in light of the Presidential declaration to introduce private land ownership. The Agency is also in the process of working out a program for an automated computerized information system on the cadastre, together with management and monitoring of land use. The Agency wishes to integrate this with the fiscal system (which is in charge of land taxes) so that more accurate land valuation can be undertaken as well as monitoring of land use. This is clearly important for private land ownership and for stimulating a land market which is also a long term aim of government policy. The Agency has prepared a draft Program for technological reform of the land cadastre system for the Republic of Kazakhstan (Astana, 2001) and hopes to introduce a station in each *oblast* to collect information from the constituent *raions*.

B2e. European Union projects

European Union, 2001 Action Program for Kazakhstan *France Lamblin, Project Manager*

The 2001 Technical Assistance Program for Kazakhstan is, to the extent possible, an integrated program consisting of projects aimed at delivering the objectives of the three selected areas of cooperation. These are; institutional, legal and administrative reform; private sector and economic development; and Environment. Within the program these are treated as cross-cutting themes and most projects address more than one, thereby further enhancing the concentration permitted by larger projects within the new regulation. As required by the regulation, preparation has taken the form of a dialogue between the representatives of the Commission and those of the Government of Kazakhstan. Also as required by the regulation's demand for differentiated programs that optimally address the specific needs of partner countries, this program aims to focus precisely on the needs of Kazakhstan. In particular, it addresses the poverty affecting a large proportion of the people of Kazakhstan, particularly those outside the main cities. This is achieved in a number of ways, including a regional element and coordination with other donors.

The 2000-2003 Indicative Program was agreed by the Commission in July 2000 and this Action Program will initiate the delivery of its objectives. These are centered upon the three areas of cooperation selected by the Government of Kazakhstan in collaboration with the Commission. However, as was the intention in the new regulation in establishing these focal areas, they have been embodied in the program as crosscutting concepts. Instead of sectoral projects as in the past, the aim of the present Action Program is to deliver these objectives through multidisciplinary, cross-sectoral projects reflecting the most direct approach to the objectives. This has not been appropriate in all cases and some sectoral projects have been included where these will be more effective.

Program components

Institutional, legal and administrative reform

Project: Support for implementation of international commitments.

The immediate objective of this project is to help Kazakhstan meet its obligations under the PCA but may also cover other international agreements to which Kazakhstan is party. The PCA itself covers a wide range of fields and the project will be equally wide ranging. It will contribute to the higher objective of the PCA: the transition of Kazakhstan to a modern, pluralist democracy whose people and foreign nationals enjoy full human rights and freedoms and where there is an open, market based economy.

Linkages: Improvements in the business environment achieved through this project will further the aims of the SME development project to be carried out under this Action Program. Helping Kazakhstan to meet its obligations under environment conventions, particularly the desertification convention, will be inline with the aims of the environmentally friendly development project to be undertaken in the Kyzyl-Orda *oblast*. It will also build upon earlier PCA implementation initiatives and actions carried out under the TACIS policy advice program.

Project: Support to the National Civil Service Training Centre

The wider objective of this project is to support the ongoing process of civil service reform in Kazakhstan. Its immediate objectives will be to help establish national and regional training centers of the Agency for Civil Service Affairs and to develop the approach as a model for other countries in Central Asia.

Linkages: An effective civil service is a prerequisite for a modern state and the outputs of this project will underpin the work of TACIS in this and other areas. The regional SME and the regional environmentally friendly development projects described in this Action Program are likely to work with the regional authorities as their partners and will benefit directly from improvements in local government. The World Bank plans a major public service investment project and it is intended that the TACIS project should work closely with that. A commitment to this effect from the Government will be required for this project to go forward. USAID and other donors have been active in this field and TACIS will build on their work.

Project: Vocational Education and Training (VET) in Specific Sectors Linked to SME development.

The wider objective of this project is improved economic performance and reduced social exclusion in selected regions and fields by more closely linking the output of VET to employers' requirements. Its immediate objectives will be to create a modern, efficient and flexible VET system using curricula based on EU models and responsive to the needs of the labor market. There will be an improved management system involving the social partners and enhancing school-enterprise relations. It will also establish pilot schemes in several regions.

Linkages: By its nature, VET forms a link between education and employment and, in the context of this program, is a bridge between the first and second areas of concentration. During its preparation, consideration will be given to the feasibility of this project operating in the same regions as the regional SME development project to make the linkage even tighter. GTZ has undertaken a number of initiatives in VET in regions and the TACIS project will link with these wherever possible. Similarly, attention will be paid to VET activities undertaken by other donors, especially the World Bank.

Private sector and assistance for economic development

Project: Regional SME development.

The objective of this project is to generate employment and economic progress by promoting the development of the SME sector. In common with all NIS countries, the proportion of SMEs in Kazakhstan is low compared with EU countries. In industrialized countries SMEs characteristically provide up to 70 percent of jobs and increasing their numbers in Kazakhstan is an essential part of the process of transition. There are, however, already numerous micro and "zero-employee" companies and these embryonic SMEs will be a major focus of attention within the project. It will operate in one or more regions and provide a range of inputs. These will include training and business advice, provided through local business development agencies, to help small and micro-enterprises to grow; support to establishing credit unions and similar

sources of micro-finance; and advice to regional authorities on supporting the growth of enterprise. The project will aim to ensure that enterprises are aware of environmental issues relevant to their activities and of the benefits of modern, environmentally sensitive methods. Subject to confirmation during the preparation of the project, the location is likely to be the Actobe region and pilot activities may take place in neighboring regions.

The project is expected to have the following results:

- More jobs and less unemployment;
- More new small and micro-enterprises;
- Stronger existing small and micro-enterprises;
- More opportunities for micro-finance; and
- Better local business environment provided by the regional government.

Linkages: The project may be linked with the VET project mentioned above. Its environmentally sensitive approach will be in line with the objectives of the proposed project in environmentally friendly agriculture. It will link with ongoing and planned EBRD projects, including small business fund projects undertaken through the joint TACIS-EBRD Bangkok Facility. It will cooperate with all other donors operating in this field in Kazakhstan.

EU TACIS

EU TACIS in the MoA is supporting a market information system for farmers. At the moment there are 38 *raions* linked to the centre, and by the end of the year, it is planned to link all *raions*. Information is provided on conditions of different sub-sectors of agriculture, on crop markets (internal and external, i.e. CIS), and on prices with the intention that eventually clients will pay for the information. At the first level, general information will be free while at the second level (where information can be advertised) and at third level (where the information is of an analytical nature), clients will pay for information, in an attempt to develop an understanding of cost recovery for service provision.

BAS Program (Business Advisory Services) European Bank for Reconstruction and Development Dmitry N. Zhukov, National Director

The BAS Program has two main objectives: assisting SMEs in their business development, and supporting the professional development of local consultants.

The BAS Program's prime objective is to help SMEs to improve operations, enter new markets and gain access to financing so that they become enduring businesses and maximize opportunities for growth. Enterprises with fewer than 500 employees are major engines of job creation in countries around the world, and by supporting SMEs in Central Asia, the BAS Program is furthering secondary objectives of poverty alleviation and sustainable economic development. Smaller enterprises tend to be able to take advantage of market opportunities more quickly than larger ones and thus contribute immensely to the competitiveness of their

economies; the BAS Program's assistance to such enterprises thus aims to support the ability of the economies in which the program operates to compete with imports entering the country as well as with the economies of other countries in cross-border and global markets. Development of local consulting capabilities is the second objective of the BAS Program. More than 80 percent of the consultants hired for BAS-supported projects in Uzbekistan and Kazakhstan are locally-based. The program provides consultants with experience working on commercial projects for local companies and, as a demanding party to the project contract, compels consultants to perform their best for client enterprises. When local consulting capabilities are insufficient for implementing a given project, the BAS Program can twin a foreign consultant with a local one; such consultant twinning provides the client enterprise with the required services and simultaneously enhances the local consultant's ability to undertake similar projects in the future. In addition, the BAS Program makes information about local consultants available to potential client enterprises, thus supporting the development of a market for advisory services in which enterprises can solicit and compare proposals and prices.

In order to meet its objectives, the BAS Program works directly with individual SMEs, providing practical business advice to assist with the removal of barriers to growth and development, and to enhance competitiveness and effective management. At the same time, BAS builds local consultancy capacity to serve enterprise needs.

The distinctive characteristic of the BAS approach lies in the role of BAS personnel who act as facilitators and intermediaries between SMEs with advisory needs and consultants who can fulfill those needs. The BAS staff gains an understanding of the requirements of each SME, diagnose the problems, and then arrange for the necessary work to be performed.

The consulting assignment is carried out by qualified and approved local business and management consultants rather than BAS staff. The business consultants act as an extension of the BAS personnel. Thus the range of BAS support is not restricted by the capabilities of internal staff. This also means that BAS does not compete with local consultants, but rather supports their development.

The assistance in a BAS project is made up of three components: a grant that covers 50 percent of the project's cost; assistance in setting up the project; and project monitoring and evaluation. 50 percent grant: enterprises that participate in the BAS Program receive a grant that covers half of the cost of the project, up to a maximum subsidy of \$ 10,000. As this is not a 100 percent subsidy, BAS client enterprises must nonetheless demonstrate a significant commitment to the project. Thus, the program is market oriented, and the provision of business advice is driven by the real needs of the enterprise. But because BAS client enterprises pay only half of what they would otherwise pay, the program makes expert advisory services accessible to SMEs for whom an advisory project would otherwise be simply too expensive. At the same time, many SMEs in Central Asia are reluctant to pay for advisory services because they have no experience of working with consultants or are not yet convinced of the value of such services; for such companies, the grant provided by the BAS Program lowers the threshold for undertaking a first advisory project. The grant is paid only after satisfactory project completion.

Assistance in setting up the project: often just as important as the grant funding is the assistance provided by BAS Program staff in project preparation. Although each case is unique, this can entail:

- 1. Assisting management in redefining a business problem in terms of tasks for a consultant: For example, an enterprise manager may realize that sales need to be increased but may not have the experience of working with a market research consultant to define that need in terms of researching new markets, projecting potential sales and developing recommendations for effective market entry. BAS Program staff often helps managers make this first conceptual step, which usually results in a first outline of the potential project's terms of reference.
- 2. Assistance in selecting a consultant: The selection of the consultant is handled internally by each client enterprise. This is important in ensuring that the client is convinced of the consultant's ability to undertake the project successfully. However, the BAS Program provides potential clients with the contact information of consultants that have been qualified [link to the section describing how consultants can participate] by the program and often is asked by enterprise managers to describe the background and experience of the various potential consultants. BAS Program staff also provide general guidance in soliciting competing proposals from potential consultants.
- 3. Assistance in developing and finalizing the terms of reference, budget, and project contract: after a consultant has been selected, the project documents must be drawn up. The BAS Program assists in completing the required steps so that the drafting process that can take months to finalize is completed within days. The program's standard formats for the terms of reference, budget, and contract facilitate this to a large degree, but it is the active intervention of the BAS Program's staff that is the key to ensuring that the project documents are usually drafted, reviewed, and signed in less than two weeks.
- 4. Project monitoring and evaluation: the third element of the BAS Program's assistance is in monitoring projects during their implementation and evaluating their results after they are completed. At a minimum, BAS Program staff attend the interim and final presentations that all consultants are required to make in a BAS-supported project and review the project reports. The BAS Program staff often provide comments to the consultant as the project progresses. If a consultant does not perform to the satisfaction of a client enterprise, BAS staff intervene to ensure that the specific reasons for the client's dissatisfaction are made clear to the consultant; in some cases, the BAS programme must impress upon the consultant that final payment will take place only upon satisfactory completion of the project. The BAS Programme undertakes project evaluations immediately upon completion of a project and again one year after project completion; in the second evaluation, the programme assesses the impact of the project on the client enterprise's overall business performance. In addition, independent evaluation is a built-in feature of the BAS Program; on a biannual basis, independent evaluators are hired to undertake random evaluations of BAS-supported projects in order to evaluate the effectiveness of the program's activities.

The BAS model is efficient, as it operates in each country with a small management team that delivers a large number of projects. Simple, effective procedures allow decisions to be made without delay.

B2f. UNDP projects

UN/FAO is working on a comparative advantage study, essentially an assessment to determine which are the most profitable and competitive areas for Kazakhstan agriculture (sub-sectors; individual crops; livestock products) and the study aims to determine what Kazakhstan should be growing and what is its specific comparative advantage

B2g. Other donor projects

Parliament of the Republic of Kazakhstan

Dr. Abdildin Serikbolsyn A., Professor, Member of the Committee of International Affairs

Key points:

- Established the Agro Consulting Center in Almaty in 1986, which is an integrated part of the Institute with three objectives. First, to re-educate faculty members including the modernization of a more western curriculum; Second, to assist farmers in the development of farmer associations and provision of practical training such as business planning; Third, to develop new text books, such as "organization of agribusiness" that was developed in collaboration with German and English institutes. They have prepared 15 new textbooks that have been accepted by the Ministry of Agriculture.
- Regarding the current state of education and research in Kazakhstan: During Soviet times
 the linkages between science and production was firmly established and was a reliable
 system; the institutes were established by agro-climatic zone and specialized area of
 agriculture; Now the whole system has been shattered into pieces; farmers receive very
 little help and these essential links must be re-established; the problem is that they were
 designed to serve the large farms and was well thought out and the education system was
 good and free of charge.
- Unfortunately, there is little interest by young people in an agricultural education today. The new system of education is expensive; the quality of teachers has gone down; many students are not from an agricultural background and are only looking for the diploma.
- The three most important agricultural policy issues today are: 1) land matters user rights, 2) relations between the government and the farmers recognition of mutual responsibilities, including development of infrastructure; 3) the preparation of specialists for the agricultural sector. There is a great need for well trained specialists that can provide leadership.

• The relationships between farmers and government are too complicated. There is a great need for a credit cooperative system – like a land bank. Tere are good commercial banks but they are not so interested in agriculture.

Association of Food Wholesalers and Retailers Sergei Morozov, Deputy Director

Kazakh food retailers and food processors established this trade association in 1996 to secure business food marketing consolidation, to combat smuggling and trading of goods outside of Kazakh food, customs, and tax regulations. The association operates somewhat like the US Food Marketing Institute in researching all aspects of food markets and educating its membership on the retail food industry. All of the major Kazakh supermarket are members—Agadir, SMAT, SMAK, Ramstore, etc.

Food wholesalers are also members. Wholesalers are better positioned with a stronger marketing than supermarkets to source and distribute food products. AMAR Company, for example, works with Russian firms to package and distribute Russian produce throughout Kazakhstan. Pulsar packages and distributes dried fruits and canned products from Hungary and other Eastern European countries—averaging \$1 million a month in product sales.

Imported food products are much higher than the volume of Kazakh production as Kazakh food production and processor continues to be underdeveloped. Anticipated that many of the large food wholesalers will develop local processing and packaging operations as the economics and profit margins dictate. Food Master, the most prominent Kazakh food processor, for example, developed from a large trading house. At the present, some 60 percent of all supermarket products are imported. Supermarket sales of cooking oil is largely imported, almost 80 percent of supermarket sales. Most juices marketed in supermarkets are imported.

Even fresh fruits and vegetables sold in supermarkets are imported. Local Kazakh production of fruits and vegetables are still sold through market stalls. In large urban areas, as Almaty, health standards require each food purveyor to have a certification for each stall. Farmers are unable to obtain a certification and therefore must sell their fresh produce though small handlers. Farmers end up with lower prices, generating lower quality production, increasing Kazakh demand for better quality produce, encouraging fresh fruit and vegetable imports for supermarket sales.

Local food processors cannot process enough quality local production for the supermarket chains and must import. Even Food Master produces local potato chips but also imports larger amounts of potato chips to meet the market demand. Local Kazakh production is lacking in technology and financing. The potential profit margins have not yet warranted investment by those interested in the business. A second issue is quality production. Because farmers do not receive good prices for their produce—given the Kazakh small kiosk bias—farmers are indifferent to demands for consistent quality production. A large gap remains between local farmers and food processors and supermarket chain.

This gap is not expected to last long. Farmers are desperate for quality product quality and pricing information. Two trends can already be seen developing: 1) local production is on a gradual rise of quality fruits and vegetables for supermarket sales and local food processors; and 2) financing for food processing is more freely available from commercial banks searching for bankable business. Infrastructure—storage of all kinds for food, particularly cold storage, and hygienic and refrigerated transport—is scarce and expensive.

The Farmers of Kazakhstan Foundation *Vladimir Levin, General Manager*

Key points:

- Developed by the TACIS project for developing agricultural consulting firms and associations focused on disseminating important and valuable information agronomic, agricultural production, pricing, policy, economic, and product information to the agricultural community.
- Affiliated with the defunct Academy of Sciences in attempting to maintain the linkages with agricultural technical research and agricultural production.
- Prepared books, pamphlets, training materials, and newsletter to agricultural producer and processor members on laws, regulations, policies as well as technical and business information:
 - How to start a business
 - How to prepare a business plan
 - Taxes for agricultural producers
 - o Legal questions for agribusiness people
 - How to develop trade associations and for what
 - What are your land rights and how can you enforce them
 - o What are the principles and operational methods of farmer business cooperatives
 - o What are microfinance loans and how can producers use them
- Operates as a member organization to serve the informational and technical assistance needs of agricultural producer/processor members within the limits of grant assistance and membership dues.

Association of Agribusiness Consultants of Kazakhstan *Baymukhanov, Timur Sultanbeckovich, Chairman*

Key points:

• The Association is one of the key agricultural trade organizations assisted and supported by the TACIS project for developing agricultural management consulting firms implemented through The Farmers of Kazakhstan Foundation.

- Through small grants combined with consulting fees of agribusiness, clients prepare informational studies on latest and most appropriate equipment and agricultural inputs, marketing studies, and technical information.
- Slowly developing commercial clients in processing industry that commission increasingly detailed marketing studies by product, quality, quantity, price, and distribution channels.
- Study areas include:
 - o Dried fruit exports to Russia and Europe
 - Wheat, maize, soybeans and vegetables (onions, cucumbers, and tomatoes), meat and eggs marketing to Eastern Siberia
 - Quality mutton and beef marketing to Russia
 - o Vegetable production, processing, and distribution in Central Asia
 - o Distribution of poultry throughout region
 - o Trade financing techniques for agricultural products from Kazakhstan

B3. Recommendations to the Mission

The scope of work states that the contractors are to present opportunities (if any) for increasing assistance to the sector that may add value to the activities already being implemented by the offices of EW and EF. This section provides the consultants' recommendations for creating synergies among activities already being implemented as well as recommendations for new activities

B3a. General integrated agriculture and water resource development model

This section of the report describes a generalized integrated model that could be implemented in different locations within the four CAR countries. Country-specific recommendations are made under section B3b. The consultants advise USAID designers to consider all elements of the generalized model as they assess the potential of the approach in specific locations.

The consultants recommend that USAID consider designing an integrated agriculture and water resource development activity adapted to local conditions within Kazakhstan. We use the term integrated from two perspectives: 1) the integration of value-chain participants (production, processing, marketing, allied industries, and market intermediaries) into a systems approach; and 2) the integration of mutually beneficial donor funded activities into a targeted geographic area to capture potential synergies among existing donor projects.

Within a geographic area the integrated approach would focus existing resources in pilot hydrographic units based on proximity to existing donor resources. This activity would also focus on agro-industries in the water unit such as a fruit and vegetable or cotton industry. Why target enterprises within a hydrographic unit? There are a number of reasons, notably, enterprises in a hydrographic unit: 1) share similar agro-climatic conditions, 2) are part of a common and structured community, 3) share similar constraints and opportunities for growth, 4) have a common enabling/regulatory environment, 5) can provide a more effective water management approach, and 6) enhance the ability to foster necessary cooperation and trust.

The rationale for an integrated approach is based on the need to: 1) facilitate transition from Soviet planned agriculture to market-oriented system, 2) focus on land issues because many agricultural development issues revolve around land rights, ownership, use, including the ability to buy sell and mortgage land, 3) mediate, if not resolve, land tenure and water management issues, 4) recognize sustainable agricultural development including production, processing, finance, and marketing activities, and 5) create synergies among donor projects by focusing diversified resources on common problems.

The primary goal of this approach would be to demonstrate to the GOK how to achieve sustainable growth, through increased efficiency, in agricultural production, processing, and marketing enterprises and the networks in which they operate. Secondary to this goal, the approach will help: 1) reduce poverty, 2) manage natural resources, 3) contribute to national food security objectives, 4) ensure increased revenues for agricultural producers and rural citizens, and 5) build private/public partnerships, sustainable enterprise, and linkages among participating beneficiaries. These goals are consistent with government strategies and thus their willingness to support targeted pilot programs.

Critical issues

The primary criteria for the selection of a targeted geographic area (hydrographic unit), is the presence of significant donor activity. Implement where resources are available and strive to create synergies among existing projects.

Caution. The consultants are not suggesting that USAID and other donor projects integrate their entire work plans to focus on this single geographic or hydrographic unit. We recognize that that would be impractical, if not impossible. What we are suggesting, however, is that the individual projects can dedicate a small portion of their expertise and resources to collaborate in the development of the integrated approach in the target area. For example, in the case of Kyrgyzstan, the LARC project has 18 offices in Kyrgyzstan, so let us suggest that they locate one office in the target area. Likewise, GTZ conducts agronomic training for farmers throughout Osh and other regions. They will be requested to implement a number of their well developed training modules in the target area. Also, IFDC can implement one demonstration field; MASHAV can implement one drip irrigation activity, etc. The consultants believe that limited, agreed upon, and targeted collaboration is possible within a defined geographic area and will produce the synergies expected to the mutual benefit of all participants.

Coordination and management. To be effective, USAID should designate a senior coordinator—a "czar"—to manage the recommended integrated activity. The "czar" should: 1) have extensive business development experience, 2) be able to work independently from any one project, 3) be mandated to liaise with projects, donors and officials, 4) be responsible for developing donor project "integration strategy," 5) have the authority to negotiate individual MOUs with all pertinent projects, 6) be responsible for monitoring and evaluating impact, 7) facilitate intercountry linkages, 8) be tasked with the collection donor project data on needed policy reform that can be used to foster agro-industrial growth, and 9) be responsible for the dissemination policy reform data and memoranda to interested trade associations and business groups who are able to advocate for policy reform.

Approach

The Integrated Agriculture and Water Resource Development Activity could be organized into the following four components that correspond with the components of existing donor projects, such as the Pragma EDP project:

- A: Agro-industry Strategy Development and Policy Reform
- B: Association and/or member organization development
- C: Business Advisory Services
- D: Business and Market Linkages

Component A: Agro-industry Strategy Development and Policy Reform

This component would respond to two important needs: 1) agro-industries lack comprehensive strategies for their own development, and 2) agro-industry entrepreneurs can and should lead policy reform efforts.

- Agro-industry strategy development: The objective of an agro-industry strategy development would be to bring entrepreneurs together in order to develop agro-industry strategies, where strategies define objectives, constraints, and resource requirements and inform specific action plans. These strategies would be used to orient TA to focus on opportunities and constraint mitigation. Recommended agro-industry strategy development tasks include: 1) The formation of an agro-industry competitiveness council within the targeted geographic area, where the council members would include agro-industry leaders, traders, academic specialists, and public sector representatives. 2) assist the council in the development of an agro-industry strategy, 3) formation of subtopic working groups, 4) assist the working groups in the development of action plans.
- Policy reform: The objective of the policy reform activity would be to condition the enabling environment in which these enterprises operate. This would be accomplished by: identifying and prioritizing policy constraints throughout value chain (coordinate information sharing); utilizing agro-industry council's local knowledge and influence to promote policy reform; and by collaborating with associations and NGO's to advocate for reform. Recommended policy reform tasks would include: 1) assist the agro-industry council in policy formation and advocacy, 2) prioritize and target constraints, 3) develop joint policy memoranda, 4) conduct private/public dialogue sessions, 5) facilitate mediation and arbitration activities, 6) land and water user rights, 7) implement awareness campaigns, and 8) collaborate with commercial law and other reform related projects.

Component B: Association and/or Member Organization Development

The objective of an association development component would be to encourage entrepreneurs to form effective member organizations in order to collaborate on 1) joint procurement and marketing mechanisms, 2) organized information diffusion, 3) recurrent training and capacity building, and 4) increase the market orientation of members and democratic processes.

There are different legal forms of member organizations and consideration should be given, depending on resources available in the targeted area. The fundamental question is to focus on a traditional association model or a corporate structure such as the IFC model.

Recommend association tasks include: 1) organization, registration, and governance, and 2) management, agronomic, and business training.

The IFC/Khujand – Farmer ownership model has unique features that include: 1) multi-*raion* representation, 2) mobilized local "champion" entrepreneurs, 3) local and external ownership, 4) strong administration, governance, and accountability, 5) strict business criteria for membership, 6) multi agro-industry involvement (cotton +), 7) significant internal financing mechanisms, and 8) joint input supply and marketing activities.

Component C: Business Advisory Services

The objective of the business advisory services is to increase business capabilities of producers, processors, and market intermediaries. The following needs have been identified for each of these three groups:

- Producers (land users) have limited or no agronomic or animal husbandry education, resource management training, market knowledge, or business skills
- Processors are reliant on old technologies and methods, are not market-oriented, unable to access credit, and they often collude with government
- Market intermediaries provide limited services.

Recommended tasks that focus on producer needs include: 1) technical advice (agronomic, livestock, water management, etc), 2) access to inputs and finance, 3) arbitration and mediation services, 4) appropriate technology advice and access, 5) land and water use rights education, 6) land registration support, 7) land and water dispute resolution, 8) business registration, 9) accounting and bookkeeping training, 10) tax advisory services, 11) water conservation and operations methods, and 12) appropriate irrigation technology. These services could be delivered through associations and/or member organizations.

Recommended tasks that focus on processor needs: 1) business plans (conform to industry strategy), 2) accounting/bookkeeping, 3) quality management, 4) sourcing raw materials and contract production, 5) feasibility analysis, 6) access to finance, 7) advice and access to appropriate technology, 8) corporate registration.

Recommended tasks that focus on market intermediary needs: 1) contracting, 2) transportation cost analysis, 3) cash flow analysis, 4) marketing and promotion.

Component D: Business and Market Linkages

The objective of the business and market linkages component is to facilitate linkages among participants in agro-industry value chain, such as producer-processor linkages, finance linkages, market linkages, and public-private linkages.

Recommended tasks for increasing producer-processor linkages include: 1) production contracting, 2) quality incentives, 3) production financing linked to production contracts, and 4) on-farm quality control training.

The objective of the finance linkages task would be to facilitate financial linkages between borrowers and creditors, in that there is a need to provide a menu of financial options depending on country's formal financial climate.

Recommended tasks for increasing finance linkages include: 1) develop and evaluate credit options, 2) supplier credit, 3) processor forward and delivery contract credit, 4) foreign importer

or cross border credit, 5) bank or micro-finance credit, 5) marketing of project support with creditors to borrowers in order to develop trust, 6) borrower training on financing approaches, 7) loan officer training on agricultural risk analysis, producer/processor cash flows, taxes, and evaluation of borrower character, 8) loan officer training on agricultural loan workout, 9) develop producer/processor credit bureau in associations, 10) develop association based peer pressure on debt repayment, 11) arrange for processor payment to producer through banks, and 12) develop inventory and warehouse receipts credit.

Recommended tasks for increasing market linkages include: 1) export market intelligence, 2) domestic market intelligence, 3) commodity profitability assessments, and 4) knowledge management of data from all projects for policy formation

Recommended tasks for increasing public-private linkages include: 1) need to incorporate local officials and academic professionals in the development process, 2) create mutually beneficial goals and objectives, 3) obtain political will for reform, 4) create sustainability mechanisms, 4) support reform leadership.

B3b. Recommendations for creating existing project synergies in Kazakhstan

In this section the consultants present their recommendations to USAID for activities in Kazakhstan.

The main theme of these recommendations is to focus and leverage resources—focus existing USAID project resources in selected geographic areas and in a comprehensive manner; and leverage other donor resources to add value to USAID projects.

Recommendations for Kazakhstan:

Recommendation 1: Kazakhstan - Integrated agriculture and water resource development activity

Recommendation 2: Provide training/skill development in agricultural finance

Recommendation 3: Long-term Government Corporate Agricultural Finance Strategy

Recommendation 4: Assistance for improved water resource management

Recommendation 1: Kazakhstan - Integrated agriculture and water resource development activity

Design and implement an integrated agriculture and water resource activity in a target hydrographic unit, such as in the area of Taraz, near a water training institute and on the border with Kyrgyzstan. Selection of the hydrographic unit should be based on existing donor presence, scope of their work activity, and commitment to coordination efforts.

Consideration on ways to utilize existing USAID resources, such as EDP and TIP, to enhance collaboration with other donor projects would be highly recommended.

Critical issues:

There are a number of inter-related critical issues that need to be considered if USAID undertakes project design work for Kazakhstan that center around the ability of producer – processor – market intermediaries to develop mutually beneficial business relationships. Producers have extremely limited access to seasonal working capital that constrains their production capacity and efficiency. Processors are constrained by a shortage of working capital which further constrains their ability to offer producers/suppliers reliable production contracts. These constraints are further compounded by late payment schemes offered by purchasers of finished products. Markets are underdeveloped and the skills required to develop existing markets are not present to any degree.

Approach:

See generalized approach above.

Time requirements:

This activity would run concurrently with the Pragma EDP/TIP funding, which is assumed to be two to four years.

Funding needed to reach program goals:

Funding would be for a senior business development "czar" and associated working budget. The yearly cost is estimated to be \$350,000 per year.

Key partner organizations:

Fruit and vegetable processors
Fruit and vegetable producer and processor associations
Water district managers – public/private dialogue
Water user associations – water resource management and cost recovery
Local NGO to provide – producer training
Winrock – farmer-to-farmer
SEAF – Investment finance
EBRD – Micro –credit

MASHAV – drip irrigation, fruit drying and other appropriate technology demonstration sites Mercy Corp – CAIP and PIC - community development activities focused on economic development pilots with small-scale fruit and vegetable processors.

Recommendation 2: Provide training/skill development in agricultural finance

Develop program for training commercial bank officers, in such technical issues as:

- Agricultural production credit and agro-industrial and food processing cash flow and credit analysis training for commercial bank officers of banks interested in learning how to finance the sector or improving their performance;
- Working with bankers and processors to develop a working capital financing formula that gives processors needed financing and bankers secure comfort of repayment or collection upon default.
- Working with bankers to develop appropriate loan pricing programs that meet their profit
 and revenue targets; have comfortable gross and net interest rate margins; and reflect the
 reasonable cash flows that agricultural sector borrowers can generate.
- Making bank officer agricultural bank training available to all commercial banks and nonbanks, such as CCK, financing agriculture.
- Developing borrower training to improve the quality of their business presentations to bankers and their understanding of what banks will and will not do in financing a borrower's operations.
- Training borrowers of promising agro-industrial businesses (food processors, wholesalers, processing and marketing associations of producers.
- Providing TA in seeking nonbank credit for agricultural production—supplier credit, processor credit, trade credit.
- Promoting quality agro-industrial, food processor, and agricultural association borrowers to banks for financing.
- Meeting with banks to learn of their interest in financing the sector.
- Learning of banks' capabilities, rates and fee structures, business plan and information requirements.
- Assisting borrowers in preparing business plan financial projections, including loan servicing costs in accordance with average bank rates and fees.

Rationale:

Strong government, donor, and business official comments on the limited knowledge of bank management and loan officers on the underlying economics of agro-industrial, food processing, and agricultural production

Because the agricultural sector is a high volume, low margin business with substantial internal and external risks, lending to the agricultural sector requires substantial understanding of the business, the people involved, the product cycles of different commodities, and historical markets and market trends.

A high element of the creditworthiness of any agricultural sector buyer is character—is he or she capable and going to do what is proposed—in addition to having adequate capital and assets, experience in the business, good credit history, favorable economic conditions to generate proposed revenues from market sales, and bank and borrower need to get to know one another as both face substantial risk if either does not do what is promised

- Banker: If borrower does not grow or processed the purported crop or product, the banker has little to liquidate other than land and machinery at a fire sale price. Rarely do agricultural lenders come out whole in the case of a loan default in a high risk market.
- Farmer or processor: If a banker does not provide the promised funds during the narrow time window in which they are needed, then the entire crop will not be grown or processed as the case may be. Timing is critical.

Agricultural bank training program for loan officers and borrowers can present many opportunities for lender and borrower to learn about the other and develop the type of long term bank/borrower relationship critical to quality commercial agricultural production and processing.

Budget and Level of Effort:

Assuming one full-time in-country agricultural banking specialist developing relationships and assisting banks and borrowers combined with a series of agricultural bank training modules tailored to the banks and customers—a budget of approximately \$350,000 to \$500,000 per year.

PRAGMA is best situated current donor to provide this training and function but should be separated from but remain complementary to the EDP effort due to the obvious conflict between business development and promotion and credit training, assessment, and access facilitation.

Recommendation 3: Long-term government corporate agricultural finance strategy

Provide the Kazakh government (Ministries of Agriculture and Finance) with technical assistance to develop a comprehensive long-term strategy for transferring the government sponsored agricultural credit companies (CCK and AFK) and services to the private sector with the objective of obtaining a greater and continuous amount of adequate financing for optimal agricultural production and agriculturally related businesses.

Background:

The Kazakhstan government has embarked upon a government-sponsored agricultural financial system to provide short and long term commercial credit services to agricultural producers, primarily due to the fact that the developed and competitive Kazakh banking industry has largely

declined to finance agricultural producers.¹⁰ While the production credit structure is government sponsored, funded and partially capitalized, it has a private sector component at the retail level providing the retail credit service and assuming the credit risk of its loan portfolio.¹¹ The government does not want to become the permanent lender to the agricultural sector and has set an outside goal of six years for transferring the government sponsored financial institutions to the private sector.¹² Nevertheless, the government wants to develop a fully operational and sustainable agricultural financial system providing a continual source of adequate and reliable financing to creditworthy borrowers of the agricultural sector.

Government Policy Issues:

Questions arise regarding the level of agricultural production desired and the amount of funds that the government is willing to commit to financing a given level of production. During Soviet times, heavy use of fertilizers and chemicals and cultivation of the maximum land area including marginal lands produced more than 30 million metric tons of wheat annually in Kazakhstan. Following independence, wheat production dipped to almost a third of the high Soviet production volume and gradually increased to the current approximately 19 million MTs. Structural adjustments in the agricultural section are continuing, most prominently the land reform issues and gradual resolution of land lease and ownership rights. All things being equal, the flow of financing to the agricultural sector will increase once land ownership rights are clear and there is a clear legal mechanism for mortgaging land.

A fully competitive financial market will finance the level of agricultural production that the market demands, taking into consideration other competing goods and services. Governments often, particularly those of more developed countries such as the US, the EU, and Japan, subsidize or sponsor agricultural production or credit to produce a higher level of agricultural production for food security and to provide its citizens with an adequate supply of affordable food. Agricultural interests in those countries were generally able to generate political support for subsidies and favorable access to financing during difficult economic times when major structural adjustments were taking place in their economies that drew available financial resources away financing the high volume, low margin agricultural sector. Subsidies and preferential access to agricultural credit both stimulates more production than the market would normally demand as well as puts agricultural production resources into the hands of the less efficient producers. Preferential access to agricultural credit or subsidized interest rates clearly reduces the total amount of debt capital that the financial community is willing to risk in the agricultural sector.

¹⁰ Exceptions are large farms having a long history of substantial production, primarily grain, and loans to producers secured by warehouse receipts of grain deposited in public bonded warehouses.

e¹¹ The basic corporate, organizational and funding structure of the KFC resembles early stages of development of the US Farm Credit System, except that the retail lending associations are established as joint stock companies and not borrower owned cooperatives. Also, to date, the government has provided the loanable funds for the KFC from budgetary sources rather than allow KFC to issue government agency securities obtaining private capital for funding agricultural loans.

¹² This time frame coincides with government expectations of when it will become a member of the WTO and needs to phase out agricultural subsidies including credit.

The Great Depression in the US and the post World War II periods in Europe and Japan are examples of these structural adjustments that spawned significant agricultural subsidies. Once created, agriculturally subsidies gradually creep upward to the point of being high budgetary concerns and are very difficult to remove, as the political constituency that gradually formed to ensure that the subsidies were enacted remains together to ensure that they are not removed. The governments of the US, the EU, and Japan have all tried over the past 30 years to remove these subsidies with success only in limiting the amount of subsidy increase.

Rationale:

Kazakhstan is at the precipice of embarking on a potentially long term program of agricultural subsidies and sponsorship of agricultural credit programs and facilities. The government appears genuinely interested in developing a strong agricultural production base and making sure that producers have adequate access to financing for that production. Measures undertaken to date suggest that the government wants to facilitate development of a private agricultural sector independent of ever-increasing government subsidies. At this juncture, the Kazakh government would greatly benefit from a comprehensive review of the Kazakh agricultural sector, of the policy issues related to subsidizing and financing agricultural production, and of the long term policy implications and considerations for spawning a fully developed and competitive private agricultural sector.

Proposed Assistance:

- Provide the GOK with a comprehensive budgetary and financial review in Kazakhstan with the Ministry of Agriculture and Ministry of Finance to give the government a realistic picture of the funding resources need to achieve government policy goals.
- Develop scenarios of differing levels of production and financing needed to support short- and long-term financing needed for the levels of production.
- Work with the government to develop alternate methods for financing a fully competitive agriculture through the private sector.
- Present different financing approaches in different markets for financing agriculture including government agency securities, 14 government-sponsored private financing initiatives with a long-term goal of private financing of the agricultural sector.

¹³ The government recognizes that a policy of heavy subsidies to agricultural from government revenues from the oil and gas industries does not truly diversify the Kazak economy. A downturn in the energy sector may cause a concomitant downturn in agriculture if the subsidies are curtailed from lack of oil and gas generated government funding

agriculture if the subsidies are curtailed from lack of oil and gas generated government funding.

14 The advantage of government agency securities for funding agricultural loans is that it gives KFC market discipline for pricing loan products and keeps lending in line with commercial loan rates for other sectors. This enables the sector to be privatized more easily as agricultural borrower loan pricing is not significantly subsidized. The US Farm Credit System is entirely funded through the issuances of short and long term notes, bonds, and other debt instruments. This enables Farm Credit banks to offer long term loans and price them more accurately without the risk of the withdrawal of demand deposits as most commercial banks.

- Make recommendations on remaining agricultural reforms that would improve private financing of the agricultural sector.
- Assist the government developing alternative financing approaches to gradually phase out government involvement in financing the sector.
- Make recommendations on various scenarios for development of sustainable government financing corporations with a phased privatization to strategic investors committed to financing agriculture and the rural Kazakh sectors.
- Develop a long term government plan to achieve the buildup and privatize the activities.
- Develop a timetable for ending government subsidies so that the market will adjust accordingly.
- Provide technical assistance on the financial and operational mechanics of governmentsponsored liquidity fund for guaranteeing official warehouse receipts issued by bonded warehouses.
- Provide the government with other alternatives for improving the availability of financing for appropriate agricultural inputs, the marketing and processing of agricultural commodities and livestock, and the free flow of funding to the agricultural sector.
- Provide the AFK and the CCK with technical advice on capitalization and funding strategies based on their respective long-term loan and leasing growth strategies.
- Provide the MOA with the latest information and techniques for agricultural risk management:
 - Provide the latest commercial insurance program information on crop insurance including technical advice from international commercial insurers on what is needed to develop and support a commercial crop insurance program.
 - o Provide information from lessons learned from the inability of the US to establish a commercially viable crop insurance program without substantial subsidies:
 - Due to Congressional appropriation of disaster relief undercutting the incentives for buying insurance.
 - Due to Congressional interference in the terms and conditions of crop insurance policies and underwriting standards.

Implementer, Budget and Level of Effort:

PRAGMA's financial sector project has done a fine job of assessing the financial capacity of the Kazakh capital markets and financial industry and therefore, has strong institutional capacity for

considering the issues and technical assistance presented here. PRAGMA may need one or two specialized consultants to assist in providing comprehensive technical advice on these complex budgetary and marketing issues relating to agriculture as they determine necessary. With that in mind, the level of effort may vary from two to six person-months depending upon the breadth of assistance the Kazakh government and the government corporation want and the level of detailed advice that they seek. Estimated cost of this assistance is \$75,000 to \$150,000, again depending upon the terms of reference realized to undertake the work that the government seeks.

Recommendation 4: Assistance for improved water resource management

The ministry sees the maintenance of I/D systems, which have become the inter-farm systems, as a great problem, because there is no caretaker. The problems of deferred maintenance, increased salinity of lands, and dramatic decrease of land productivity have prompted the irrigators to create an Irrigators Alliance. The Alliance is trying to raise awareness amongst farmers but has very limited resources. The Alliance chairman has written letters to the donor community seeking assistance to help to increase farmers' awareness and protect their interest. So far, they have not been successful, saying that farmers do not have much confidence in WUAs because they do not know enough about them and how could they work for them.

The water resources officials feel that if assistance can be provided to increase the knowledge and skills of water system operators, as well as equipping the WUAs with modern technical equipment for on farm water measuring and financial support to the nascent WUAs, it would result in more effective use of water resources. The need points in the direction of an overall support to irrigated agriculture, encompassing not only water, but also agronomy, economy, and specialized training in development and financing of agribusiness. Also, intensified training for awareness and understanding of the WUAs concept and principles of their work country-wide, as well as application of simple water saving technologies and organizational/management measures can be seen as priorities for making visible improvements in irrigation management.

In Kazakhstan as in other countries of central Asia, there is not enough adequate expertise, at both the higher policy level, middle management and the local water users' levels. This implies that that a narrow focus on water users associations alone, as expected by some local professionals, would not be fruitful. It needs to be accompanied by corresponding changes in policy, law, procedures, incentives, and organizations, and interface with state authorities and support systems. Institutional changes in particular, even the least controversial procedural changes cannot be achieved without a clear understanding of what is needed.

The development of strategies, particularly those for locally managed water at the lower levels of the water resource system, should be based on declared government policies. However, attempts may be made through research-based information sharing to help in the policy formulation. For instance, should the existing large farms prove to be more advantageous in economies of scale, water users' or farmers' organizations may be designed to take over collective responsibility for such large units in order to avoid fragmentation of land holdings.

The Government of Kazakhstan would like to see the water users' associations/RCCWUs cover at least 1 million ha in the future, which is less than 50 percent of irrigated land in the country.

There is a perceived problem with the further establishment of these associations. Farmers are basically afraid to trust the new structures and become members, because they do not see much difference from the former *kolkhoz*, and thus prefer to farm by themselves. Because of this, the Kazakh Ministry of Agriculture/Department for Foreign Investment and Relations is convinced that more technical assistance in form of awareness and training for farmers is needed, which would provide them with methodical and practical assistance. Similar TA is needed for the local government to bring more understanding of the new on-farm water management.

Implementation of the reform is a problem if the irrigation network cannot function reasonably; it is difficult to form water associations. The water losses in the process of delivery to the farms are up to 60 percent, mainly due to poor condition of the irrigation canals. Water measuring devices are also not existent and local government cannot help from their budgets.

In addition, the communication media (local radio, television, publications, etc.) have not provided any information about water users associations and rural population could be better served. The ministry feels that a special TA project could help to change farmers' thinking, to increase willingness of farmers to join into associations and prepare them for new conditions of market economy and water management.

Elements of this recommendation should include:

- Training for leaders and specialist of farms, local governments, trainers for market development of irrigated agriculture
- Organization of study tours for representatives of water user association leaders and local government officials
- Development and dissemination of suitable brochures and publications on water rights and management techniques
- Preparation of additional regulations for improvement of functioning of RCCWUs
- Preparation of educational audio-visual materials and broadcasting

B3c. Regional issues

Regional Agricultural Land and Water Management Training

Provide funding support for Central Asian regional agricultural land and water management training activities. Such activities would focus on land and water user rights, provision of land and water mediation services, on-farm land and water management best practices, and curriculum development. The idea is to support activities that develop viable solutions to land and water problems, create discussion/actions on land and water policy issues, and facilitate the regional dissemination of information on land and water issues.

For a number of reasons, locating training and education activities in Taraz, Kazakhstan would appear to be an optimal choice. Even though the consultants did not visit the Kazakh Research Institute of Water Management, we believe there is logic to supporting the proposed regional training and education activities in collaboration with this institute. Taraz has a long historical tradition as a city of academic research and learning (Taraz State University, twinned with Indiana University). It is equidistant between Shymkent and Almaty covering most of the Kazakh area of agricultural production that primarily relies upon irrigation. Taraz is close to Kyrgyzstan and reasonably close to Uzbekistan, particularly the Fergana Valley, which relies heavily upon irrigated agriculture and thereby would encourage use by academics and agribusiness people and water authorities of both.

For example, support for the Institute of Water Management could include the establishment of a mediation training program for providing land and water mediation services. This activity could also train mediators and the trainers of mediators to develop a cadre of professional to serve rural mediation needs. A USDA-type program for mediating complex water management issues could be used as a model for this activity.

ANNEX A: KAZAKHSTAN - COUNTRY PROFILE

Source: US Library of Congress

Population and Society

Total population was estimated in 1994 at 17,268,000, making Kazakhstan the fourth most populous former Soviet republic. As of 1990, 57 percent of the country's residents lived in cities. Because much of the land is too dry to be more than marginally habitable, overall population density is a very low 6.2 persons per square kilometer. Large portions of the republic, especially in the south and west, have a population density of less than one person per square kilometer. In 1989 some 1.4 million Kazakhs lived outside Kazakhstan, nearly all in the Russian and Uzbek republics. At that time, an estimated 1 million Kazakhs lived in China, and a sizeable but uncounted Kazakh population resided in Mongolia.

Demographic Factors

The birth rate, which is declining slowly, was estimated at 19.4 births per 1,000 population in 1994. The death rate, which has been climbing slowly, was estimated at 7.9 per 1,000 population--leaving a rate of natural increase of 1.1 percent, by far the lowest among the five Central Asian republics. In 1995 the total fertility rate--2.4 births per woman, a drop from the 1990 figure of 2.8--also was far below the rates for the other Central Asian republics. In the first six months of 1994, some 1.8 percent fewer babies were born than in the same period the previous year. In the same months, the number of deaths rose by 2.5 percent compared with those in the same period in 1993. In some provinces, death rates are much higher than the average, however. Shygys Qazaqstan (East Kazakhstan) Province has a death rate of 12.9 per thousand; Soltustik Qazaqstan (North Kazakhstan) Province, eleven per 1,000; and Almaty Province, 11.3 deaths per 1,000. The cause of nearly half of these deaths is cardiovascular disease.

Because of declining life expectancy and decreases in the size of the Russian population, which is demographically older and has a low birth rate, the republic's residents are a relatively young group; in 1991 there were only 149 pensioners per 1,000 population, as opposed to 212 per 1,000 in the former Soviet Union as a whole. The republic is experiencing a pronounced outflow of citizens, primarily non-Kazakhs moving to other former Soviet republics. Although figures conflict, it seems likely that as many as 750,000 non-Kazakhs left the republic between independence and the end of 1995. Official figures indicate that in the first half of 1994 some 220,400 people left, compared with 149,800 in the same period of 1993. In 1992 and 1993, the number of Russian emigrants was estimated at 100,000 to 300,000. Such out-migration is not uniform. Some regions, such as Qaraghandy, have lost as much as 10 percent of their total population, resulting in shortages of technicians and skilled specialists in that heavily industrial area.

To some extent, the outflow has been offset by in-migration, which has been of two types. Kazakhstan's government has actively encouraged the return of Kazakhs from elsewhere in the former Soviet Union and from China and Mongolia. Unlike other ethnic groups, ethnic Kazakhs are granted automatic citizenship. More than 60,000 Kazakhs emigrated from Mongolia in 1991-94, their settlement--or resettlement--eased by government assistance. Most were moved to the

northern provinces, where the majority of Kazakhstan's Russian population lives. Because these "Mongol Kazakhs" generally do not know Russian and continue to pursue traditional nomadic lifestyles, the impact of their resettlement has been disproportionate to their actual numbers. The other major source of in-migration has been non-Kazakhs arriving from other parts of Central Asia to avoid inhospitable conditions; most of these people also have settled in northern Kazakhstan. Although officially forbidden and actively discouraged, this in-migration has continued. In a further attempt to control in-migration, President Nazarbayev decreed that no more than 5,000 families would be permitted to take up residence in the republic in 1996.

Ethnic Groups

Kazakhstan is the only former Soviet republic where the indigenous ethnic group is not a majority of the population. In 1994 eight of the country's eleven provinces had Slavic (Russian and Ukrainian) population majorities. Only the three southernmost provinces were populated principally by Kazakhs and other Turkic groups; the capital city, Almaty, had a European (German and Russian) majority. Overall, in 1994 the population was about 44 percent Kazakh, 36 percent Russian, 5 percent Ukrainian, and 4 percent German. Tatars and Uzbeks each represented about 2 percent of the population; Azerbaijanis, Uygurs, and Belarusians each represented 1 percent; and the remaining 4 percent included approximately ninety other nationalities

Kazakhstan's ethnic composition is the driving force behind much of the country's political and cultural life. In most ways, the republic's two major ethnic groups, the Kazakhs and the "Russian-speakers" (Russians, Ukrainians, Germans, and Belarusians), may as well live in different countries. To the Russians, most of whom live in northern Kazakhstan within a day's drive of Russia proper, Kazakhstan is an extension of the Siberian frontier and a product of Russian and Soviet development. To most Kazakhs, these Russians are usurpers. Of Kazakhstan's current Russian residents, 38 percent were born outside the republic, while most of the rest are second-generation Kazakhstani citizens.

The Nazarbayev government has announced plans to move the capital from Almaty in the far southeast to Aqmola in the north-central region by 1998. That change would cause a shift of the Kazakh population northward and accelerate the absorption of the Russian-dominated northern provinces into the Kazakhstani state. Over the longer term, the role of Russians in the society of Kazakhstan also is determined by a demographic factor--the average age of the Russian population is higher, and its birth rate much lower.

Physical Environment

With an area of about 2,717,300 square kilometers, Kazakhstan is more than twice the combined size of the other four Central Asian states. The country borders Turkmenistan, Uzbekistan, and Kyrgyzstan to the south; Russia to the north; Russia and the Caspian Sea to the west; and China's Xinjiang Uygur Autonomous Region to the east.

Topography and Drainage

There is considerable topographical variation within Kazakhstan. The highest elevation, Khan Tengri Mountain, on the Kyrgyz border in the Tian Shan range, is 6,995 meters; the lowest point, at Karagiye, in the Caspian Depression in the west, is 132 meters below sea level. Only 12.4

percent of Kazakhstan is mountainous, with most of the mountains located in the Altay and Tian Shan ranges of the east and northeast, although the Ural Mountains extend southward from Russia into the northern part of west-central Kazakhstan. Many of the peaks of the Altay and Tian Shan ranges are snow covered year-round, and their run-off is the source for most of Kazakhstan's rivers and streams.

Except for the Tobol, Ishim, and Irtysh rivers (the Kazakh names for which are, respectively, Tobyl, Esil, and Ertis), portions of which flow through Kazakhstan, all of Kazakhstan's rivers and streams are part of landlocked systems. They either flow into isolated bodies of water such as the Caspian Sea or simply disappear into the steppes and deserts of central and southern Kazakhstan. Many rivers, streams, and lakes are seasonal, evaporating in summer. The three largest bodies of water are Lake Balkhash, a partially fresh, partially saline lake in the east, near Almaty, and the Caspian and Aral seas, both of which lie partially within Kazakhstan. Some 9.4 percent of Kazakhstan's land is mixed prairie and forest or treeless prairie, primarily in the north or in the basin of the Ural River in the west. More than three-quarters of the country, including the entire west and most of the south, is either semidesert (33.2 percent) or desert (44 percent). The terrain in these regions is bare, eroded, broken uplands, with sand dunes in the Qizilqum (red sand; in the Russian form, Kyzylkum) and Moyunqum (in the Russian form, Moin Kum) deserts, which occupy south-central Kazakhstan. Most of the country lies at between 200 and 300 meters above sea level, but Kazakhstan's Caspian shore includes some of the lowest elevations on Earth.

Climate

Because Kazakhstan is so far from the oceans, the climate is sharply continental and very dry. Precipitation in the mountains of the east averages as much as 600 millimeters per year, mostly in the form of snow, but most of the republic receives only 100 to 200 millimeters per year. Precipitation totals less than 100 millimeters in the south-central regions around Qyzylorda. A lack of precipitation makes Kazakhstan a sunny republic; the north averages 120 clear days a year, and the south averages 260. The lack of moderating bodies of water also means that temperatures can vary widely. Average winter temperatures are -3°C in the north and 18°C in the south; summer temperatures average 19°C in the north and 28°-30°C in the south. Within locations differences are extreme, and temperature can change very suddenly. The winter air temperature can fall to -50°C, and in summer the ground temperature can reach as high as 70°C.

The Role of Women

Like its 1993 predecessor, the constitution of 1995 defends women's rights implicitly, if not entirely explicitly. The document guarantees citizens the right to work and forbids discrimination based on geographic origin, gender, race, nationality, religious or political belief, and language. In practice, social opinion tends to associate women in the workplace with the abuses of the Soviet past. The early 1990s saw the loss of more than 100,000 day-care spaces, and public opinion strongly favors returning primary responsibility for the rearing and educating of children to mothers. In April 1995, President Nazarbayev said that one of the republic's goals must be to create an economy in which a mother can work at home, raising her children. This general opinion has been reflected in governmental appointments and private enterprise; almost no women occupy senior positions in the country, either in government or in business.

The declining birth rate is another issue with the potential to become politicized because it affects the demographic "race" between Kazakhs and Russians. With demographic statistics in mind, Kazakh nationalist parties have attempted to ban abortions and birth control for Kazakh women; they have also made efforts to reduce the number of Kazakh women who have children outside marriage. In 1988, the last year for which there are figures, 11.24 percent of the births in the republic were to unmarried women. Such births were slightly more common in cities (12.72 percent) than in rural areas (9.67 percent), suggesting that such births may be more common among Russians than among Kazakhs.

Women's health issues have not been addressed effectively in Kazakhstan. Maternal mortality rates average 80 per 10,000 births for the entire country, but they are believed to be much higher in rural areas. Of the 4.2 million women of childbearing age, an estimated 15 percent have borne seven or more children. Nevertheless, in 1992 the number of abortions exceeded the number of births, although the high percentage of early-stage abortions performed in private clinics complicates data gathering. According to one expert estimate, the average per woman is five abortions. Rising abortion rates are attributable, at least in part, to the high price or unavailability of contraceptive devices, which became much less accessible after 1991. In 1992 an estimated 15 percent of women were using some form of contraception.

Sovereignty and Independence

In June 1990, Moscow declared formally the sovereignty of the central government over Kazakhstan, forcing Kazakhstan to elaborate its own statement of sovereignty. This exchange greatly exacerbated tensions between the republic's two largest ethnic groups, who at that point were numerically about equal. Beginning in mid-August 1990, Kazakh and Russian nationalists began to demonstrate frequently around Kazakhstan's parliament building, attempting to influence the final statement of sovereignty being developed within. The statement was adopted in October 1990.

In keeping with practices in other republics at that time, the parliament had named Nazarbayev its chairman, and then, soon afterward, it had converted the chairmanship to the presidency of the republic. In contrast to the presidents of the other republics, especially those in the independence-minded Baltic states, Nazarbayev remained strongly committed to the perpetuation of the Soviet Union throughout the spring and summer of 1991. He took this position largely because he considered the republics too interdependent economically to survive separation. At the same time, however, Nazarbayev fought hard to secure republic control of Kazakhstan's enormous mineral wealth and industrial potential. This objective became particularly important after 1990, when it was learned that Gorbachev had negotiated an agreement with Chevron, a United States oil company, to develop Kazakhstan's Tengiz oil fields. Gorbachev did not consult Nazarbayev until talks were nearly complete. At Nazarbayev's insistence, Moscow surrendered control of the republic's mineral resources in June 1991. Gorbachev's authority crumbled rapidly throughout 1991. Nazarbayev, however, continued to support him, persistently urging other republic leaders to sign the revised Union Treaty, which Gorbachev had put forward in a last attempt to hold the Soviet Union together.

Because of the coup attempted by Moscow hard-liners against the Gorbachev government in August 1991, the Union Treaty never was signed. Ambivalent about the removal of Gorbachev,

Nazarbayev did not condemn the coup attempt until its second day. However, once the incompetence of the plotters became clear, Nazarbayev threw his weight solidly behind Gorbachev and continuation of some form of union, largely because of his conviction that independence would be economic suicide.

At the same time, however, Nazarbayev pragmatically began preparing his republic for much greater freedom, if not for actual independence. He appointed professional economists and managers to high posts, and he began to seek the advice of foreign development and business experts. The outlawing of the CPK, which followed the attempted coup, also permitted Nazarbayev to take virtually complete control of the republic's economy, more than 90 percent of which had been under the partial or complete direction of the central Soviet government until late 1991. Nazarbayev solidified his position by winning an uncontested election for president in December 1991.

A week after the election, Nazarbayev became the president of an independent state when the leaders of Russia, Ukraine, and Belarus signed documents dissolving the Soviet Union. Nazarbayev quickly convened a meeting of the leaders of the five Central Asian states, thus effectively raising the specter of a "Turkic" confederation of former republics as a counterweight to the "Slavic" states (Russia, Ukraine, and Belarus) in whatever federation might succeed the Soviet Union. This move persuaded the three Slavic presidents to include Kazakhstan among the signatories to a recast document of dissolution. Thus, the capital of Kazakhstan lent its name to the Alma-Ata Declaration, in which eleven of the fifteen Soviet republics announced the expansion of the thirteen-day-old CIS. On December 16, 1991, just five days before that declaration, Kazakhstan had become the last of the republics to proclaim its independence

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